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EPA Region 5 Records Ctr.



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SITE ASSESSMENT REPORT
FOR
EGAN MARINE
LEMONT, COOK COUNTY, ILLINOIS
TDD: S05-9910-012
PAN: 059C1201SIXX

March 1, 2000

Prepared for:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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1. Introduction

The United States Environmental Protection Agency (U.S. EPA) tasked the Superfund Technical Assessment and Response Team (START) contractor Ecology and Environment, Inc. (E & E), under Technical Direction Document (TDD) S05-9910-012 to assess site conditions and threats to human health and the environment at the Egan Marine (EM) site, located in Lemont, Cook County, Illinois.

2. Background

2.1 Site Description

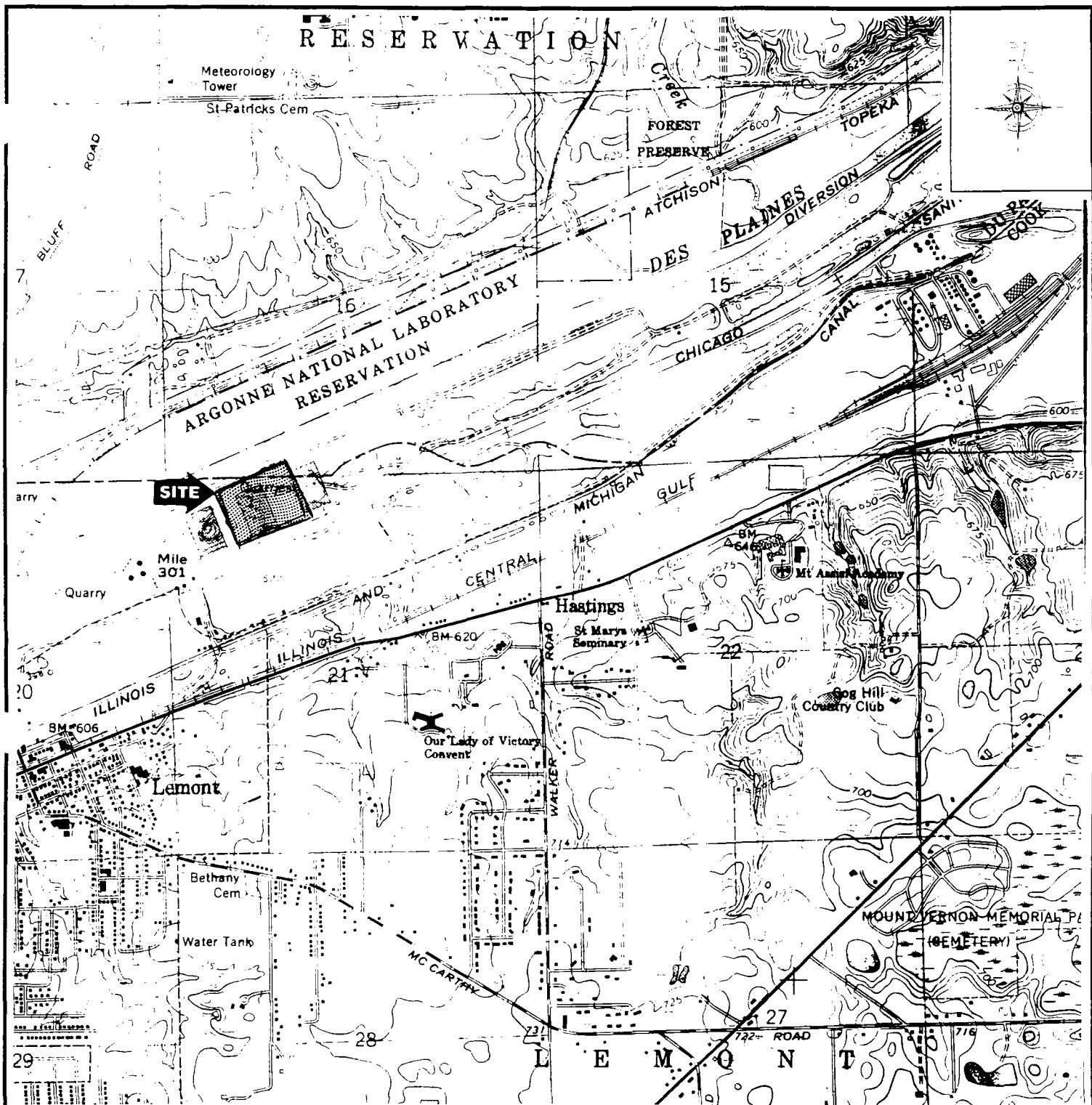
The EM site is located northeast of Lemont, Cook County, Illinois, adjacent to the Chicago Sanitary Drainage and Ship (CSDS) canal at mile marker 301.3 (latitude 41°41'06.4" N, longitude 87°59'15.9" W). The facility is situated on two connecting peninsulas, designated as the east and west peninsulas, formed from rock quarries (Figure 2-1).

The facility consists of numerous oil storage tanks of volumes greater than 10,000 gallons, numerous 55-gallon drums, and portable tanks. Oil storage tanks are located on both peninsulas. EM barges and tugboats are stored in the water between the two peninsulas. The oil tanks are in close proximity of the canal. A waste soil pile is located on the south side of the western peninsula.

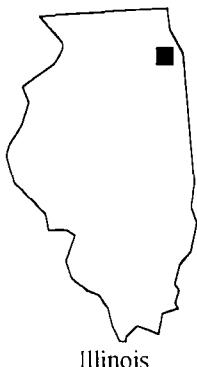
2.2 Site History

On October 20, 1994, U.S. EPA and the E & E Technical Assistance Team (TAT) performed a Spill Prevention, Control and Countermeasure (SPCC) inspection at the EM site. Preventative measures for oil spills provided by EM at the time of the inspection were ruled inadequate by U.S. EPA. At the time of the inspection, the facility had numerous oil stains at various locations throughout the facility. Fifty-five gallon drums containing waste oil from emergency response cleanups were found without lids or tipped over with the contents spilled on the ground. Some of the sealed drums at the EM site, stacked and covered with a tarp, were found to have punctures that allowed the contents to drain out.

Dennis Egan, the site owner, received a letter of deficiency (LOD) from U.S. EPA on November 3, 1994, indicating violations to the SPCC regulation and requesting a response within 30 days. On January 6, 1995, a warning letter was issued to Dennis Egan stating that he had not responded to the first LOD. A followup inspection was conducted to investigate the progress of the facility's compliance with the SPCC regulations.



Quadrangle Location



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Superfund Technical Assessment and Response Team

Region 5

33 North Dearborn Street, Chicago, Illinois 60602

Title	Site Location Map	Figure	2-1
Site	Egan Marine	Scale	1:24,000
City	Lemont	TDD	S05-9910-012
Source	Sag Bridge Quadrangle U.S.G.S. 7.5 Minute Series	Date	1963, 1978

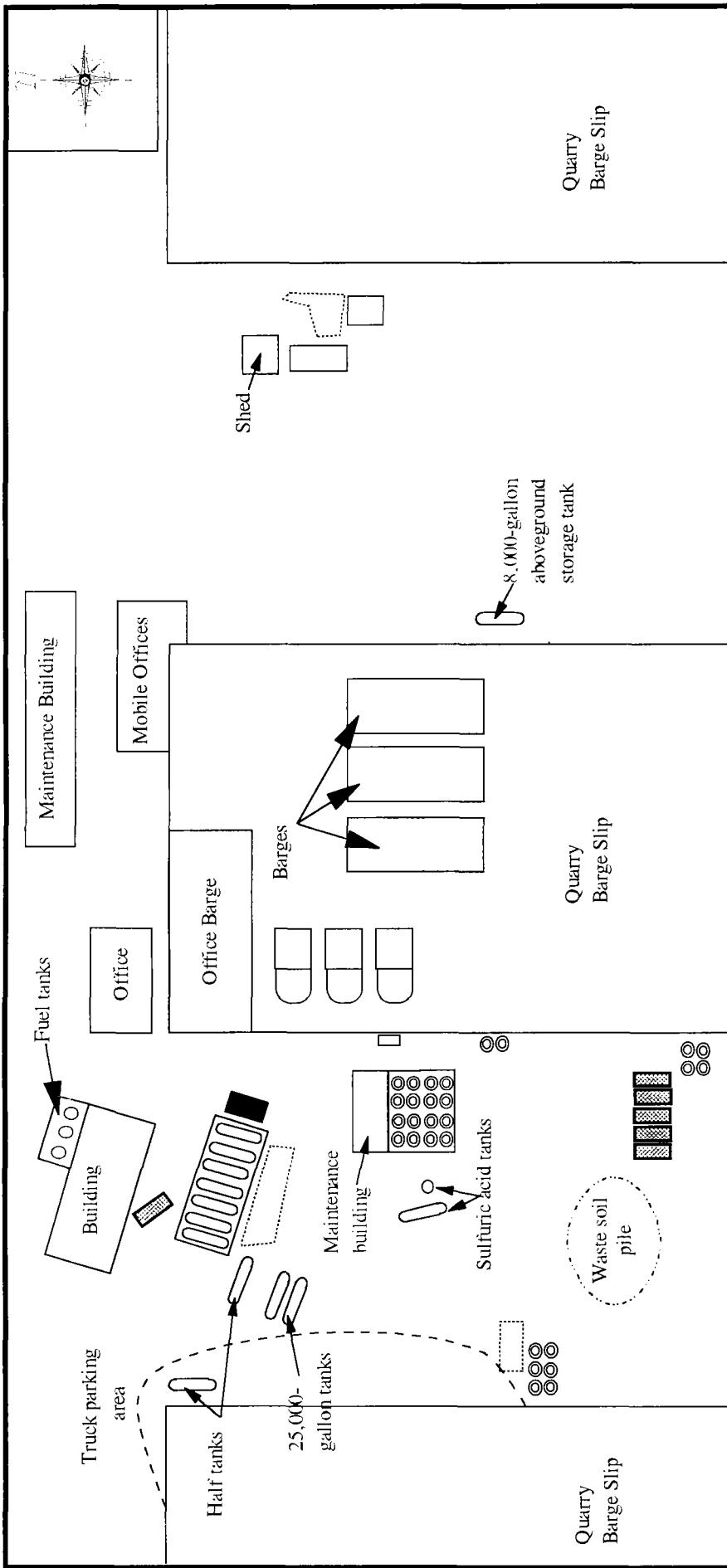
On January 10, 1995, U.S. EPA, TAT, the Illinois Environmental Protection Agency (Illinois EPA), and the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) conducted a multi-media inspection at the EM facility. During the inspection, EM reported that their business practices include the sale and storage of edible oil for animal feed, cleaning barges, and providing emergency response services. A total of four soil samples were collected and analyzed for total petroleum hydrocarbons (TPH). Analytical results from the soil sampled detected TPH at levels up to 157,000 parts per million (ppm). The 1995 inspection concluded that the EM site was not in compliance with SPCC regulations.

3. Site Assessment

On October 28, 1999, START members Joe Klemp and Tim Calloway met U.S. EPA and United States Coast Guard (USCG) representatives at the USCG office in Burr Ridge, Illinois. A meeting was held with U.S. EPA representatives from the Emergency Response Branch (ERB), the Resource Conservation and Recovery Act (RCRA) section, the Civil Investigation Department. All parties were concerned with the business practices occurring at the EM site. A report written by the Illinois Environmental Protection Agency (Illinois EPA) dated October 8, 1999, was circulated to the meeting attendants. Pictures presented in the report documented leaking 55-gallon drums; numerous large aboveground storage tanks (ASTs); and large piles of scrap metal. The USCG reported that as a result of previous site findings, the owner of the EM site was under a court order not to clean out any of the storage tanks located on the site. The site owner was also told by the state not to move any drums located at the site. A site video taken by the USCG of daily activities at the EM site was presented during the meeting. The video documented the emptying and crushing of waste drums onto site soil and the resulting waste oil present in the site soil.

After the meeting, U.S. EPA, USCG, and START drove from the USCG office to the EM site. At the EM site all parties were met by representatives for the potentially responsible party (PRP) and the lawyer for the PRP. The PRP representatives allowed U.S. EPA and START access to collect samples from the materials on the site. U.S. EPA and START conducted a site walkthrough and photodocumented the location of the numerous drums and tanks on the site.

The wastes viewed on site are as follows: a large pile of soil mixed with an oily material is on the southwest side of the site in close proximity to the CSDS canal, numerous 55-gallon drums marked as nonhazardous material; a drum staging area in the vicinity of the large storage tanks including drums labeled as Thermo C oil and one drum labeled as corrosive; and, the remainder of the drums are stored on the east end of the site behind a pole barn. The drums in the vicinity of the pole barn were empty. Numerous ASTs of a size in excess of 10,000 gallons are staged in the central part of the site west of the barge slips. Various truck and semi-trailers are stored throughout the site (Figure 3-1).



3-2

Chicago Sanitary Ship Canal

Flow →

Legend

- Oil/water separator
- Glass-lined tanks on concrete pad
- - - Quarry debris hill
- Areas containing 55-gallon drums
- Aboveground storage tank
- Building/structures
- Tugboats
- Semi-trailer

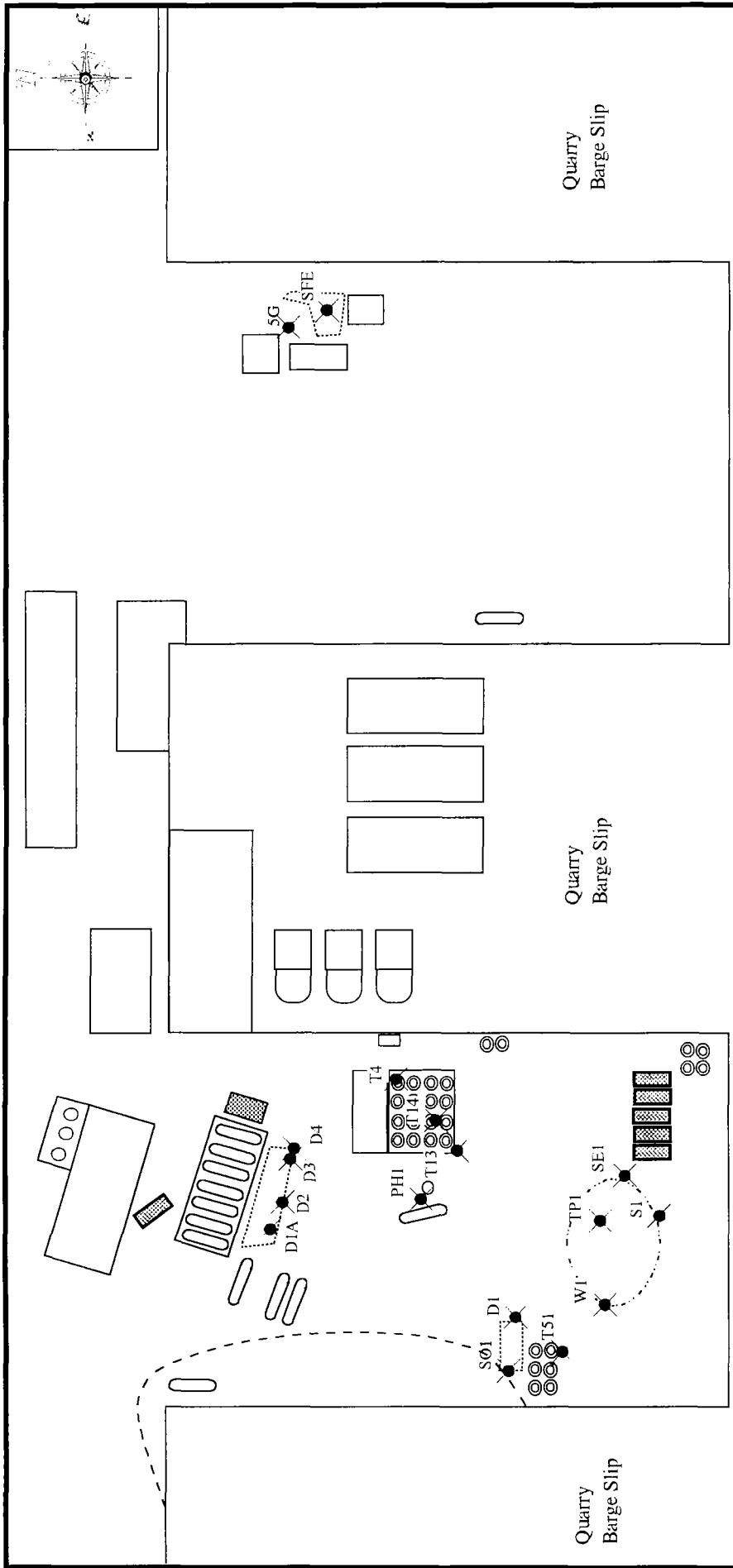
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Title	Site Features Map	Figure 3-1
Sit	Egan Marine	Scale Not to scale
Ciy	Lemont	TDD \$05-9910-012
Source	Ecology and Environment, Inc.	Date March 1, 2000

START collected soil and liquid samples from different site locations (Figure 3-2). A total of five samples were collected from the waste soil pile on the southwest side of the site and are designated W1, W1D, S1, SE1, TP1. Three liquid samples labeled T4, T14, and T13 were collected from the vertical ASTs located in the central part of the site. Two samples of a tar-like material, T51 and T51D, were collected from a large AST which was discarded on the west side of the site. Sample D1 was collected from a drum which was reported to contain soybean mash located on the west side of the site. Soil sample SO1 was collected from the ground beneath the alleged drums of soybean mash. Drum samples D1A, D2, D3, and D4 were waste oil collected from a section of 55-gallon drums stored in the central part of the site. Soil sample SFE was collected from an area of discarded empty 55-gallon drums located on the east end of the site. A sample of a white and brown liquid material (5G) was collected from a five-gallon bucket located adjacent to the empty 55-gallon drums on the east end of site. A sample of liquid (PH1) was collected from a vertical AST that was reported to contain sulfuric acid.

The samples were packaged and shipped to CT & E Environmental Services in Ludington, Michigan, for analyses. An Office of Solid Waste and Emergency Response (OSWER) Quality Assurance and Quality Control (QA/QC) Level II analytical data package was requested for the sample results.



3-4

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Title	Sample Location	Figure
Site	Egan Marine	3-2
City	Lemont	Not to scale
TDD	Illinois	505-9910-012
Source	Ecology and Environment, Inc.	Date March 1, 2000

Chicago Sanitary Ship Canal



Legend

● Sample location

4. Analytical Results

Nineteen samples were collected at the EM site. These samples were sent to CT & E Environmental Services for analyses. Eighteen of the nineteen samples were analyzed for the following; semivolatile organic compounds (SVOCs), total hazardous halogens, polychlorinated biphenyls (PCBs), total Resource Conservation and Recovery Act (RCRA) metals, toxicity characteristic leaching procedure (TCLP) metals, and flash point. One sample, PH1, was analyzed for pH in standard units only. Analytical results are summarized in Tables 4-1 and 4-2, and the validated data packages are included in Appendix A.

Analytical results of samples D3 and D4 indicated the presence of PCBs in those drums sampled at the site. Samples SE1 and TP1 indicated the presence of PCBs in site soils at detectable levels. The analytical results also indicate low levels of leachable lead, arsenic, chromium, and selenium in drum and site soil samples. Naphthalene, fluoranthene, phenanthrene, and pyrene were also detected in the soil and drum samples. Sample T14 indicates an ignitable hazardous waste contained in the site storage tanks with a flash point of 140 degrees Fahrenheit (°F)

Table 4-1

SOIL SAMPLE ANALYTICAL RESULTS - METALS AND FLASH POINT
EGAN MARINE
LEMONT, COOK COUNTY, ILLINOIS

OCTOBER 1999

Parameter	Sample Identification								
	T14	D1A	D2	D3	D4	T51	T54D	SEF	SG
Flash point(°F)	140	> 200	> 200	> 200	> 200	> 200	> 200	> 200	> 200
Total Metals (mg/kg)									
Arsenic	ND	ND	5.1 JM	ND	ND	ND	ND	ND	ND
Barium	8.6	14	110	ND	ND	87	77	76	500
Cadmium	0.19	0.21	0.77	ND	ND	0.53	0.61	ND	ND
Chromium	6.7	5.3	33	ND	ND	15	13	57	ND
Lead	11	7.9	130	0.63	ND	92	83	25	1.3 JM
Mercury	ND	ND	0.22	ND	ND	ND	ND	0.075	ND
Selenium	ND	ND	3.5	2.8 JM	ND	ND	ND	ND	ND
Silver	11	0.063	0.92	0.14 JM	0.13 JM	0.34 JM	0.28	4.4	0.040 JM
TCLP Metals (mg/l)									
Arsenic	ND	ND	ND	ND	ND	ND	ND	ND	ND
Barium	1.7	5.6	0.14	0.61	2.3	0.33	0.35	0.31	0.92
Cadmium	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	ND	ND	0.064	ND	ND	ND	ND	ND	ND
Lead	2.3	3.6	ND	ND	ND	ND	ND	ND	ND

Table 4-1

SOIL SAMPLE ANALYTICAL RESULTS - METALS AND FLASH POINT
EGAN MARINE
LEMONT, COOK COUNTY, ILLINOIS

OCTOBER 1999

Parameter	Sample Identification						SG		
	T14	D1A	D2	D3	D4	T51	T5D	SFF	
Mercury	ND	ND	ND	ND DM	ND	ND	ND	ND	ND
Selenium	0.21	ND	0.045	ND	ND	0.020	0.024	ND	ND
Silver	ND	ND	ND	ND	ND	ND	ND	ND	ND

Key:

ND	= Not detected.
J	= Estimated result.
M	= Matrix interference.
D	= Dilution.
mg/kg	= Milligrams per kilogram.
mg/L	= Milligrams per liter.

Source: CT & E Environmental Services, Ludington, Michigan. START analytical TDD S05-9910-810.

Table 4-1 cont'd

SOL SAMPLE ANALYTICAL RESULTS - METALS AND FLASH POINT
EGAN MARINE
LEMONT, COOK COUNTY, ILLINOIS

OCTOBER 1999

Parameter	Sample Identification						T4	T13
	S1	SE1	W1	WD	TP1	D1		
Flash point (°F)	> 200	> 200	> 200	> 200	> 200	> 200	> 200	> 200
Total Metals (mg/kg)								
Arsenic	ND	ND	ND	ND	ND	ND	ND	ND
Barium	35	54	9.5	12	11	0.93	3.6	1.3
Cadmium	ND	ND	0.24	ND	0.19	0.38	ND	0.36
Chromium	17	38	5.1	4.9	5.0	ND	ND	1.2
Lead	120	52	19	20	33	1.1	6.8	3.2
Mercury	ND	0.03	ND	ND	ND	ND	ND	ND
Selenium	ND	ND	ND	3.4 JM	ND	3.2	ND	4.1 JM
Silver	0.66	3.3	0.19	0.24	0.27 JM	0.059 JM	0.13 JM	0.089 JM
TCLP Metals (mg/l.)								
Arsenic	ND	0.024	ND	0.029 JM	ND	ND	ND	ND
Barium	0.48	0.51	0.26	0.30	0.59	0.25	0.53	0.89
Cadmium	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	ND	ND	ND	ND	ND	ND	ND	ND
Lead	0.31	ND	0.031	ND	ND	ND	3.3	ND

Table 4-1 cont'd

SOIL SAMPLE ANALYTICAL RESULTS - METALS AND FLASH POINT
EGAN MARINE
LEMONT, COOK COUNTY, ILLINOIS

OCTOBER 1999

Parameter	Sample Identification								
	S1	SE1	W1	WID	TP1	D1	SO1	T4	T13
Mercury	ND	ND	ND	ND	ND	ND	ND	ND	ND
Selenium	0.020	0.020	0.029	ND	0.020	ND	0.058	0.39	ND
Silver	ND	ND	ND	ND	ND	ND	ND	ND	ND

Key:

- ND = Not detected.
- J = Estimated result.
- M = Matrix interference.
- D = Dilution.
- mg/kg = Milligrams per kilogram.
- mg/L = Milligrams per liter.

Source: CT & E Environmental Services, Ludington, Michigan. START analytical TDD S05-9910-810.

Table 4-2

SOIL SAMPLE ANALYTICAL RESULTS - HALOGENATED / SEMIVOLATILE ORGANIC COMPOUNDS
EGAN MARINE SITE
LEMONT, COOK COUNTY, ILLINOIS

OCTOBER 1999

Analytical Parameter	Sample Identification						SFE	5G
	T14	DIA	D2	D3	D4	T51		
Halogens (Total Hazardous Halogens) (mg/kg)	ND	ND	ND	ND	ND	ND	ND	ND
Semivolatile Organic Compounds (SVOCs) (mg/kg)								
2-Methyl naphthalene	770 DM	ND	1200 DM	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	ND	ND	ND	ND	ND	ND	ND	ND
Flouranthene	ND	ND	330 DM	ND	ND	270 DM	270 DM	ND
Flourene	ND	ND	240 DM	ND	ND	ND	ND	ND
Naphthalene	290 DM	ND	930 DM	ND	ND	ND	ND	ND
Phenanthrene	ND	ND	800 DM	ND	ND	650 DM	560 DM	ND
Pyrene	ND	ND	280 DM	ND	ND	310 DM	310 DM	290 DM

Table 4-2 cont'd

SOIL SAMPLE ANALYTICAL RESULTS - HALOGENATED / SEMIVOLATILE ORGANIC COMPOUNDS
EGAN MARINE SITE
LEMONT, COOK COUNTY, ILLINOIS

OCTOBER 1999

Analytical Parameter	Sample Identification								
	S1	SE1	W1	W1D	TP1	D1	SO1	T4	T13
Halogens (Total Hazardous Halogens) (mg/kg)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Semivolatile Organic Compounds (SVOCs) (mg/kg)									
2-Methyl naphthalene	ND	ND	ND	ND	ND	ND	ND	1,800 DM	ND
bis(2-Ethylhexyl)phthalate	ND	ND	ND	ND	410 DM	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Flourene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND	ND	ND	1,100 DM	ND
Phenanthrene	ND	ND	ND	ND	ND	ND	ND	920 DM	ND
Pyrene	250	ND	ND	ND	260 DM	ND	ND	380 DM	ND

Key:

- mg/kg = Milligrams per kilogram.
- ND = Not detected.
- J = Estimated result
- D = Dilution
- M = Matrix interference

Source: CT & E Environmental Services, Ludington, Michigan. START analytical TDD S05-9910-810.

Table 4-3

SOIL SAMPLE ANALYTICAL RESULTS - POLYCHLORINATED BIPHENYLS
EGAN MARINE SITE
LEMONT, ILLINOIS

OCTOBER 1999

Analytical Parameter	Sample Identification																	
	S1	SF1	W1	W1D	TP1	D1	S01	T4	T13	T14	D1	D2	D3	D4	T51	T5ID	SFE	SG
PCBs (mg/kg)																		
Aroclor-1016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1221	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1232	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1242	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1248	ND	2.0	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	77	D	ND	ND	ND
Aroclor-1254	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND

Key:

ND = Not detect
 mg/kg = Milligram per kilogram
 D = Dilution

Source: CT & E Environmental Services, START analytical TDD S05-9910-810.

5. Discussion of Potential Threats

Paragraph (b)(2) of Part 300.415 of the National Contingency Plan (NCP) lists factors to be considered when determining the appropriateness of a potential removal action at a site. Section 1002 of Title I of the Oil Pollution Act (OPA) of 1990 establishes liability of responsible parties for removal costs and damages caused by oil spills and discharges into navigable waterways. Subsection (b)(2) of Section 1002 describes the damages covered under OPA. The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) applies to hazardous substances detected at the EM site. The following discussion presents a summary of findings which are applicable to the EM site.

CERCLA Threats:

- **Actual or potential exposure to hazardous substances or pollutants or contaminants by nearby populations, animals, or food chains.**
Hazardous substances detected at the EM site include; PCBs in some of the drums and site soils at concentrations above the 50 ppm cleanup limit established by the Toxic Substance Control Act (TSCA), and low levels of naphthalene, flouranthene, phenanthrene, and pyrene. These substances are located in storage containers on the site as well as in the site soils. Site workers and visitors may be exposed to these substances on a daily basis.
- According to the Agency for Toxic Substance and Disease Registry (ATSDR) toxicological profiles, the chemical substances flouranthene, naphthalene, and pyrene have the following health effects. Numerous reports have associated human cancer with exposure to mixtures of polynuclear aromatic hydrocarbons (PAHs)

- which includes the compounds fluoranthene and pyrene. Naphthalene can cause hemolytic anemia in humans. Excessive exposure to naphthalene may cause nausea, vomiting, diarrhea, blood in urine, and jaundice.
- According to ATSDR toxicological profiles for arsenic, the Department of Health and Human Services, U.S. EPA, and the National Toxicology Program have determined and classified inorganic arsenic as carcinogenic to humans.
- According to ATSDR toxicological profiles for PCBs, health effects reported for PCBs include numbness of the limbs, respiratory symptoms, altered immune response, and liver damage. Animal studies have shown PCBs to cause birth defects such as abortions, stillbirths, and underweight offspring. The Department of Health and Human Services, the International Agency for Research on Cancer, and U.S. EPA has determined that PCBs are probable human carcinogens.
- **Weather conditions that may cause pollutants or contaminants to migrate or be released.** Precipitation or high winds could result in an increased risk of release of contaminants off site. The threat of severe weather also includes the possible migration of the contaminants into the CSDS canal which is connected to the Des Plaines River, a fishery.
- **Threat of fire or explosion.** The EM site contains several large tanks and numerous 55-gallon drums which contain flammable materials. These containers are stored in close proximity to each other and an ignition source near these containers could result in a large fire or explosion.

OPA Threats:

- **Natural resources.** Natural resources are defined as land, fish, wildlife, biota, air, water, groundwater, drinking water supplies, and other resources. The potential for release of petroleum-based material and PCBs on site into the CSDS canal exists. The release of these contaminants into the CSDS canal also threatens migration of the contaminants to the Des Plaines River, a fishery.

6. Removal Cost Projection

Total Site Removal Cost Under CERCLA

A removal of the CERCLA-regulated wastes at the EM site would involve the disposal of all drum containerized wastes, removal and disposal of the sulfuric acid tank wastes, and containment of the petroleum-containing ASTs. Site soils would require sampling for extent of contamination and possible removal.

The removal projection for the EM site is based on removal of all drum wastes, disposal of the sulfuric acid, and containment of tank wastes. Added costs would be involved for total removal of the materials stored within the site tanks and remediation of the contaminated soils. No study has been performed to see if the site wastes have impacted groundwater in the area.

The site work is expected to require sixty-five 10 hour work days with two additional days allocated for site mobilization/demobilization, standby, and equipment decontamination. The removal will begin with collection and characterization of the 55-gallon drum containerized site wastes. The drum removal was estimated at \$100 per drum for an estimate of 1,500 drums. This first part of the removal action includes hazard categorization analyses of all site drum wastes to determine disposal options. A minimum of one week wait is required for laboratory analytical results of the various drum containerized wastestreams material prior to disposal off site. The acids contained in two of the ASTs will also be disposed of under the CERCLA wastestreams. Cost estimate for disposal of the acid wastes is \$3.00 per gallon for an estimated 10,000 gallons.

The removal of the waste oils would include pumping all waste oils out of the ASTs and disposing off site. The oil sludge remaining in the tanks would be solidified with a proper media such as kiln dust and disposed of in an approved landfill. The tanks would be scrapped, decontaminated, and the metal recycled. Any oil-contaminated soil would be solidified with kiln dust and disposed of at

a landfill. Landfill disposal costs for the contaminated soil was estimated at \$65 a ton for 5,000 tons. Disposal cost of the waste oil contained in the ASTs was estimated at \$3.00 a gallon with an estimated volume of 50,000 gallons.

Removal Cost Estimate for CERCLA Regulated Wastes

A removal of the CERCLA regulated wastes at the EM site would involve the disposal of all drum containerized wastes, removal and disposal of the sulfuric acid tank wastes, and containment of the petroleum containing aboveground storage tanks. Site soils would require sampling for extent of contamination and possible removal.

The removal projection for the EM site is based on removal of all drum wastes, disposal of the sulfuric acid, and containment of tank wastes. Added costs would be involved for total removal of the materials stored within the site tanks and remediation of the contaminated soils. No study has been performed to see if the site wastes have impacted groundwater in the area.

The work is expected to require forty-five 10 hour work days with 2 additional days allocated for site mobilization/demobilization, standby, and equipment decontamination. The removal will begin with collection and characterization of the 55-gallon drum containerized site wastes. The drum removal was estimated at \$100 per drum for an estimate of 1,500 drums. This first part of the removal action includes hazard categorization analyses of all site drum wastes to determine disposal options. A minimum of a week wait is required for laboratory analyses of the various drum containerized wastestreams material prior to disposal off site. The acids contained in two of the aboveground storage tanks will also be disposed of under the CERCLA wastestreams. Cost estimate for disposal of the acid wastes contained in the ASTs located on the west side of the site, is estimated at \$3.00 per gallon for an estimated 10,000 gallons.

Removal Cost Estimate for OPA Regulated Wastes

Under OPA all waste oil must be removed to prevent possible release of the oil into the navigable waterways including the CSDS Canal. The removal of the waste oils would include pumping all waste oils out of the aboveground storage tanks and disposing off site. The oil sludge remaining in the tanks would be solidified with a proper media such as kiln dust and disposed of in an approved landfill. The tanks would be scrapped and the metal recycled. Any oil contaminated soil, as well as

the waste soil pile located in the south central part of the site, would be solidified with kiln dust and disposed of at a landfill. The volume of waste soil is estimated at 5,000 tons.

The OPA removal is expected to require 45 work days of ten hours each. A total of two additional days are included for mobilization/demobilization, decontamination of equipment, and standby time.

Cost Projection

A Removal Cost Management System (RCMS) model of the total projected removal cost was run for the site and is presented in Appendix C. The cost projection is split into section for costs incurred under CERCLA and OPA. A crew consisting of two cleanup technicians, two equipment operators and one foreman was utilized for personnel for the CERCLA costs. A crew consisting of two cleanup technicians, two equipment operators and one foreman was utilized for personnel for the OPA costs. Administrative personnel for each cost section includes a Response Manager, Field Cost Administrator, Transport and Disposal (T&D) Officer, and QA/QC Chemist. A twenty-five percent site and contractor contingency were added to the projections. Government costs were based on the hours needed for personnel including one OSC and one START for the length of the removal action. Total estimated site removal costs for the EM site are \$1,149,562.00 of OPA funds and \$466,385 of CERCLA funds. Total estimated site removal costs for the EM site are \$ 1,698,861. All costs are estimated conservatively, but additional cost may be incurred.

7. Summary

The EM site is an active facility that operates a business which includes the sale and storage of edible oil for animal feed, cleaning barges, and providing emergency response services. Site assessment sampling at the EM site identified 55-gallon drums containing PCB oil, TCLP metal contamination, and PAH contaminants including fluoranthene and pyrene. The contamination was also detected in site soils. The site is adjacent to the CSDS canal which drains into the Des Plaines River. The existence of oil and PCB contaminated material located in drums stored at the site and within the site soils indicate a removal action is necessary to prevent the material from impacting a public waterway and human health and the environment.

Appendix A

Validated Analytical Results



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M E M O R A N D U M

DATE: February 14, 2000

TO: Joseph Klemp, START Project Manager, E & E, Chicago, Illinois

FROM: David Hendren, START Analytical Services Manager, E & E, Chicago, Illinois

THROUGH: Patrick Zwillig, START Assistant Program Manager, E & E, Chicago, Illinois

SUBJECT: Organic Data Quality Review for Semivolatile Organic Compounds (SVOCs), Eagan Marine, Lemont, Cook County, Illinois

REFERENCE: Project TDD S05-9910-012 Analytical TDD S05-9910-810
Project PAN 9C1201SIXX Analytical PAN 9CAJ01TAXX

The data quality assurance (QA) review of six soil and 12 oil samples collected from the Eagan Marine site is complete. The samples were collected on October 28, 1999, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). The samples were submitted to CT&E Environmental Services, Inc., Ludington, Michigan. The laboratory analyses were performed according to the United States Environmental Protection Agency (U.S. EPA) Solid Waste 846 Method 8270.

Sample Identification

<u>START Identification No.</u>	<u>Laboratory Identification No.</u>
S-1	3992779001
SE-1	3992779002
W-1	3992779003
W-1D	3992779004
TP-1	3992779005
D-1	3992779006
SO-1	3992779007
T-4	3992779008
T-13	3992779009

Eagan Marine
Project TDD S05-9910-012
Analytical TDD S05-9910-810
SVOCs
Page 2

START <u>Identification No.</u>	Laboratory <u>Identification No.</u>
T-14	3992779010
D-1A	3992779011
D-2	3992779012
D-3	3992779013
D-4	3992779014
T-51	3992779015
TD-51	3992779016
5-FE	3992779017
5-G	3992779018

Data Qualifications:

I. Sample Holding Time: Acceptable

The samples were collected on October 28, 1999, extracted on November 10, 1999, and analyzed on November 11 and 12, 1999. This is within the 14-day holding time limit, from collection to extraction, and 40-day limit from extraction to analysis.

II. Gas Chromatography/Mass Spectrometry (GC/MS) Tuning: Acceptable

GC/MS tuning to meet ion abundance criteria using decafluorotriphenylphosphine (DFTPP) were acceptable and samples were analyzed within 12 hours of DFTPP tuning.

III. Calibrations:

• Initial Calibration: Acceptable

A five-point initial calibration was performed prior to analysis. All average response factors were greater than 0.05. The percent relative standard deviations (%RSDs) between response factors were less than 30% for all detected target compounds.

• Continuing Calibration: Acceptable

The percent differences of the response factors were less than 25%, as required for detected target compounds.

Eagan Marine
Project TDD S05-9910-012
Analytical TDD S05-9910-810
SVOCs
Page 3

IV. Blank: Acceptable

A method blank was analyzed with the samples. No target compounds or contaminants were detected in the blank.

V. Internal Standards: Acceptable

The areas of the internal standards in the samples were within -50% to +100% of the associated calibration check standard. The retention times of the internal standards were within the 30-second control limit.

VI. Compound Identification: Acceptable

The mass spectra and retention times of the detected compounds matched those of the standards.

VII. Additional QC Checks: Acceptable

The recoveries of the surrogates used in the samples and blank were within laboratory-established guidelines.

VIII. Overall Assessment of Data for Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990), Data Validation Procedures, Section 5.0, BNAs By GC/MS analysis. Based upon the information provided, the data are acceptable for use.



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M E M O R A N D U M

DATE: February 14, 2000

TO: Joseph Klemp, START Project Manager, E & E, Chicago, Illinois

FROM: David Hendren, START Analytical Services Manager, E & E, Chicago, Illinois

THROUGH: Patrick Zwilling, START Assistant Program Manager, E & E, Chicago, Illinois

SUBJECT: Data Quality Review for Polychlorinated Biphenyls (PCBs), Eagan Marine, Lemont, Cook County, Illinois

REFERENCE: Project TDD S05-9910-012 Analytical TDD S05-9910-810
Project PAN 9C1201SIXX Analytical PAN 9CAJ01TAXX

The data quality assurance (QA) review of six soil and 12 oil samples collected from the Eagan Marine site is complete. The samples were collected on October 28, 1999, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). The samples were submitted to CT&E Environmental Services, Inc., Ludington, Michigan. The laboratory analyses were performed according to the United States Environmental Protection Agency (U.S. EPA) Solid Waste 846 Method 8082.

Sample Identification

<u>START Identification No.</u>	<u>Laboratory Identification No.</u>
S-1	3992779001
SE-1	3992779002
W-1	3992779003
W-1D	3992779004
TP-1	3992779005
D-1	3992779006
SO-1	3992779007
T-4	3992779008
T-13	3992779009
T-14	3992779010
D-1A	3992779011
D-2	3992779012

Eagan Marine
Project TDD S05-9910-012
Analytical TDD S05-9910-810
PCBs
Page 2

START <u>Identification No.</u>	Laboratory <u>Identification No.</u>
D-3	3992779013
D-4	3992779014
T-51	3992779015
TD-51	3992779016
5-FE	3992779017
5-G	3992779018

Data Qualifications:

I. Sample Holding Time: Acceptable

The samples were collected on October 28, 1999, extracted on November 8, 1999, and analyzed on November 10, 1999. This is within the 14-day holding time limit, from collection to extraction, and 40-day limit from extraction to analysis.

II. Instrument Performance: Acceptable

The chromatographic resolution was adequate in the standard and sample chromatograms. Surrogate retention times were consistent in the samples and standards.

III. Calibrations:

• Initial Calibration: Acceptable

A five-point initial calibration was performed prior to analysis. The percent relative standard deviations (%RSDs) between response factors were less than 20% for all PCBs.

• Continuing Calibration: Acceptable

The percent differences of the response factors were less than 15%, for detected PCBs.

IV. Blank: Acceptable

A method blank was analyzed with the sample. No target compounds or contaminants were detected in the blank.

Eagan Marine
Project TDD S05-9910-012
Analytical TDD S05-9910-810
PCBs
Page 3

V. Compound Identification: Acceptable

The chromatographic patterns of the detected PCBs matched those of the standards.

VI. Additional QC Checks: Acceptable

The recoveries of the surrogates used in the samples were within acceptable laboratory limits.

VII. Overall Assessment of Data for Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990), Data Validation Procedures, Section 7.0, PCBs. Based upon the information provided, the data are acceptable for use.



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M E M O R A N D U M

DATE: February 14, 2000

TO: Joseph Klemp, START Project Manager, E & E, Chicago, Illinois

FROM: David Hendren, START Analytical Services Manager, E & E, Chicago, Illinois

THROUGH: Patrick Zwillig, START Assistant Program Manager, E & E, Chicago, Illinois

SUBJECT: Data Quality Review for Flash Point and pH, Eagan Marine, Lemont, Cook County, Illinois

REFERENCE: Project TDD S05-9910-012 Analytical TDD S05-9910-810
Project PAN 9C1201SIXX Analytical PAN 9CAJ01TAXX

The data quality assurance (QA) review of one liquid, six soil, and 12 oil samples collected from the Eagan Marine site is complete. The samples were collected on October 28, 1999, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). The samples were submitted to CT&E Environmental Services, Inc., Ludington, Michigan. The laboratory analyses were performed according to the United States Environmental Protection Agency (U.S. EPA) Solid Waste 846 Methods 1010 (flash point) and 9040B (pH).

Sample Identification

<u>START Identification No.</u>	<u>Laboratory Identification No.</u>
S-1	3992779001
SE-1	3992779002
W-1	3992779003
W-1D	3992779004
TP-1	3992779005
D-1	3992779006
SO-1	3992779007
T-4	3992779008
T-13	3992779009
T-14	3992779010
D-1A	3992779011
D-2	3992779012

Eagan Marine
Project TDD S05-9910-010
Analytical TDD S05-9910-812
Flash Point, pH
Page 2

START <u>Identification No.</u>	Laboratory <u>Identification No.</u>
D-3	3992779013
D-4	3992779014
T-51	3992779015
TD-51	3992779016
5-FE	3992779017
5-G	3992779018
PH-1	3992779019

Data Qualifications:

I. Sample Holding Time: Acceptable

The samples were collected on October 28, 1999, and analyzed for flash point on November 2, 1999. Analysis of sample PH-1 for pH was performed on November 9, 1999. The Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990) does not specify holding times for these parameters.

II. Calibrations: Acceptable

The calibrations for flash point and pH were verified before sample analyses. The calibration for flash point was verified using xylene and the calibration for pH was verified following analyses of three standard solutions.

III. Overall Assessment of Data for Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in OSWER Data Validation Procedures, Section 9.0, Generic Data Validation Procedures. Based upon the information provided, the data are acceptable for use.



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DATE: February 14, 2000

TO: Joseph Klemp, START Project Manager, E & E, Chicago, Illinois

FROM: David Hendren, START Analytical Services Manager, E & E, Chicago, Illinois

THROUGH: Patrick Zwillings, START Assistant Program Manager, E & E, Chicago, Illinois

SUBJECT: Data Quality Review for Total Organic Halogens (TOX), Eagan Marine, Lemont, Cook County, Illinois

REFERENCE: Project TDD S05-9910-012 Analytical TDD S05-9910-810
Project PAN 9C1201SIXX Analytical PAN 9CAJ01TAXX

The data quality assurance (QA) review of six soil and 12 oil samples collected from the Eagan Marine site is complete. The samples were collected on October 28, 1999, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). The samples were submitted to CT&E Environmental Services, Inc., Ludington, Michigan. The laboratory analyses were performed according to the United States Environmental Protection Agency (U.S. EPA) Solid Waste 846 Method 8021.

Sample Identification

<u>START Identification No.</u>	<u>Laboratory Identification No.</u>
S-1	3992779001
SE-1	3992779002
W-1	3992779003
W-1D	3992779004
TP-1	3992779005
D-1	3992779006
SO-1	3992779007
T-4	3992779008
T-13	3992779009

Eagan Marine
Project TDD S05-9910-012
Analytical TDD S05-9910-810
TOX
Page 2

START <u>Identification No.</u>	Laboratory <u>Identification No.</u>
T-14	3992779010
D-1A	3992779011
D-2	3992779012
D-3	3992779013
D-4	3992779014
T-51	3992779015
TD-51	3992779016
5-FE	3992779017
5-G	3992779018

Data Qualifications:

I. Sample Holding Time: Acceptable

The samples were collected on October 28, 1999, extracted on November 9, 1999, and analyzed on November 9 and 10, 1999. This is within the 14-day holding time limit, from collection to extraction, and 40-day limit from extraction to analysis.

II. Calibrations:

• Initial Calibration: Acceptable

A five-point initial calibration was performed prior to analysis. The percent relative standard deviations (%RSDs) between response factors were less than 20% for all detected target compounds.

• Continuing Calibration: Acceptable

The percent differences of the response factors were less than 15%, as required for detected target compounds.

III. Blank: Acceptable

A method blank was analyzed with the samples. No target compounds or contaminants were detected in the blank.

IV. Compound Identification: Acceptable

The mass spectra and retention times of the detected compounds matched those of the standards.

Eagan Marine
Project TDD S05-9910-012
Analytical TDD S05-9910-810
TOX
Page 3

V. Additional QC Checks: Acceptable

The recoveries of the surrogates used in the samples and blank were within laboratory-established guidelines.

VI. Overall Assessment of Data for Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990), Data Validation Procedures, Section 9.0, Generic Data Validation Procedures. Based upon the information provided, the data are acceptable for use.



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M E M O R A N D U M

DATE: February 14, 2000

TO: Joseph Klemp, START Project Manager, E & E, Chicago, Illinois

FROM: David Hendren, START Analytical Services Manager, E & E, Chicago, Illinois

THROUGH: Patrick Zwillig, START Assistant Program Manager, E & E, Chicago, Illinois

SUBJECT: Inorganic Data Quality Review for Resource Conservation and Recovery Act (RCRA) and Toxicity Characteristic Leaching Procedure (TCLP) Metals, Eagan Marine, Lemont, Cook County, Illinois

REFERENCE: Project TDD S05-9910-012 Analytical TDD S05-9910-810
Project PAN 9C1201SIXX Analytical PAN 9CAJ01TAXX

The data quality assurance (QA) review of six soil and 12 oil samples collected from the Eagan Marine site is complete. The samples were collected on October 28, 1999, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). The samples were submitted to CT&E Environmental Services, Inc., Ludington, Michigan. The laboratory analyses were performed according to the United States Environmental Protection Agency (U.S. EPA) Solid Waste 846 Methods 6010 and 7000.

Sample Identification

<u>START Identification No.</u>	<u>Laboratory Identification No.</u>
S-1	3992779001
SE-1	3992779002
W-1	3992779003
W-1D	3992779004
TP-1	3992779005
D-1	3992779006
SO-1	3992779007
T-4	3992779008
T-13	3992779009
T-14	3992779010
D-1A	3992779011

Eagan Marine
Project TDD S05-9910-012
Analytical TDD S05-9910-810
RCRA, TCLP Metals
Page 2

START <u>Identification No.</u>	Laboratory <u>Identification No.</u>
D-2	3992779012
D-3	3992779013
D-4	3992779014
T-51	3992779015
TD-51	3992779016
5-FE	3992779017
5-G	3992779018

Data Qualifications:

I. Sample Holding Time: Acceptable

The samples were collected on October 28, 1999, and analyzed between November 9 and 11, 1999. Analysis for mercury was performed on November 12, 1999. This is within the 6-month (28 days for mercury) holding time limit.

II. Calibration:

• Initial Calibration: Acceptable

Recoveries for the initial calibration verification were within 90 to 110% (80 to 120% for mercury), as required. The correlation coefficient for mercury exceeded 0.995.

• Continuing Calibration: Acceptable

All analytes included in the continuing calibration verification standard were within 90 to 110% (80 to 120% for mercury), as required.

III. Blanks: Acceptable

Calibration and preparation blanks were analyzed with each analytical batch. No target analytes were detected in the blanks.

IV. Overall Assessment of Data For Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990) Data Validation Procedures, Section 3.0, Metallic Inorganic Parameters. Based upon the information provided, the data are acceptable for use.

CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID:	3992779001	Matrix:	Non Aqueous Liquid
Client Sample ID:	S-1	Location:	
Collected:	10/28/99 11:30:00A	Project:	S05-9910-810
Received:	11/2/99 1:36:25PM	Sampled By:	JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
TOTAL METALS ANALYSIS							
Arsenic	ND	mg/Kg	0.9	SW-846 6010	11/5/99 14:55	11/9/99 17:48	HNL
Barium	35	mg/Kg	0.5	SW-846 6010	11/5/99 14:55	11/9/99 17:48	HNL
Cadmium	ND	mg/Kg	0.09	SW-846 6010	11/5/99 14:55	11/9/99 17:48	HNL
Chromium	17	mg/Kg	2	SW-846 6010	11/5/99 14:55	11/9/99 17:48	HNL
Lead	120	mg/Kg	0.5	SW-846 6010	11/5/99 14:55	11/9/99 17:48	HNL
Mercury	ND	mg/Kg	0.015	SW-846 7471	11/11/99 14:14	11/12/99 14:3	JL
Selenium	ND	mg/Kg	2	SW-846 6010	11/5/99 14:55	11/11/99 10:2	HNL
Silver	0.66	mg/Kg	0.05	SW-846 6010	11/5/99 14:55	11/11/99 10:2	HNL
GENERAL CHEMISTRY ANALYSIS							
Total Hazardous Halogens	ND	mg/Kg	650	SW-846 8021B	11/9/99 5:53	11/9/99 18:50	ORY
PHYSICAL PROPERTY ANALYSIS							
Flashpoint	>200	degree F		SW-846 1010		11/2/99 14:42	WD
GC VOLATILE ORGANIC ANALYSIS							
1,1,1-Trichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 18:50	ORY
1,1,2-Trichloro-1,2,2-fluoroet	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 18:50	ORY
1,1-Dichloroethylene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 18:50	ORY
1,2-Dichlorobenzene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 18:50	ORY
1,2-Dichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 18:50	ORY
Carbon tetrachloride	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 18:50	ORY
Chloroform	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 18:50	ORY
cis-1,2-Dichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 18:50	ORY
Dichlorodifluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 18:50	ORY
Methylene chloride	ND	mg/Kg	250	SW-846 8021B	11/9/99 5:53	11/9/99 18:50	ORY
Tetrachloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 18:50	ORY
Trichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 18:50	ORY
Trichlorofluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 18:50	ORY

GC/MS SEMIVOLATILE ORGANIC ANALYSIS

Reported: 11/16/1999

Quantifiers Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
 B Blank contaminant
 D Dilution
 J Estimated result
 M Matrix interference

000005

CT&E Environmental Services Inc.

1 ~ 2 of 73

Ecology and Environment, Inc.

Sample ID: 3992779001 **Matrix:** Non Aqueous Liquid
Client Sample ID: S-1 **Location:**
Collected: 10/28/99 11:30:00A **Project:** S05-9910-810
Received: 11/2/99 1:36:25PM **Sampled By:** JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
1,2,4-Trichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
1,2-Dichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
1,3-Dichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
1,4-Dichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
2,4,5-Trichlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
2,4,6-Trichlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
2,4-Dichlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
2,4-Dimethylphenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
2,4-Dinitrophenol	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
2,4-Dinitrotoluene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
2,6-Dinitrotoluene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
~ Ioronaphthalene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
2-Chlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
2-Methyl naphthalene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
2-Methyl-4,6-dinitrophenol	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
2-Methylphenol (o-Cresol)	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
2-Nitroaniline	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
2-Nitrophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
3&4-Methylphenol (p&m-Cresol)	ND D,M	mg/Kg	490	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
3,3-Dichlorobenzidine	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
3-Nitroaniline	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
4-Bromophenyl-phenylether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
4-Chloro-3-methylphenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
4-Chloroaniline	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
4-Chlorophenyl-phenylether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
4-Nitroaniline	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
4-Nitrophenol	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
Acenaphthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
Acenaphthylene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
Anthracene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
Benzo(a)anthracene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
Benzo[a]pyrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
Benzo[b]fluoranthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS

Reported: 11/16/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
 B Blank contaminant
 D Dilution
 J Estimated result
 M Matrix interference

000006

CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID: 3992779001 **Matrix:** Non Aqueous Liquid
Client Sample ID: S-1 **Location:**
Collected: 10/28/99 11:30:00A **Project:** S05-9910-810
Received: 11/2/99 1:36:25PM **Sampled By:** JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
<u>GC/MS SEMIVOLATILE ORGANIC ANALYSIS</u>							
Benzo[g,h,i]perylene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
Benzo[k]fluoranthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
Bis(2-Chloroethoxy)methane	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
Bis(2-Chloroethyl)ether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
bis(2-chloroisopropyl)ether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
bis(2-Ethylhexyl)phthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
Butylbenzylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
Carbazole	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
Chrysene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
Di-n-butylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
di-n-Octylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
endo[a,h]anthracene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
Luenzofuran	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
Diethylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
Dimethylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
Fluoranthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
Fluorene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
Hexachlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
Hexachlorobutadiene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
Hexachlorocyclopentadiene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
Hexachloroethane	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
Indeno[1,2,3-c,d] pyrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
Isophorone	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
N-Nitroso-di-n-propylamine	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
N-Nitrosodiphenylamine	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
Naphthalene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
Nitrobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
Pentachlorophenol	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
Phenanthrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
Phenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS
Pyrene	250 D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 15:2	JLS

GC SEMIVOLATILE ORGANIC ANALYSIS

Reported: 11/16/199

Qualifiers

ND Not detected
 B Blank contaminant
 D Dilution
 J Estimated result
 M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

000007

CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID: 3992779001 **Matrix:** Non Aqueous Liquid
Client Sample ID: S-1 **Location:**
Collected: 10/28/99 11:30:00A **Project:** S05-9910-810
Received: 11/2/99 1:36:25PM **Sampled By:** JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC SEMIVOLATILE ORGANIC ANALYSIS							
Aroclor-1016	ND	mg/Kg	0.90	SW846 8082 PCB	11/8/99 17:08	11/10/99 10:0	TMJ
Aroclor-1221	ND	mg/Kg	0.90	SW846 8082 PCB	11/8/99 17:08	11/10/99 10:0	TMJ
Aroclor-1232	ND	mg/Kg	0.90	SW846 8082 PCB	11/8/99 17:08	11/10/99 10:0	TMJ
Aroclor-1242	ND	mg/Kg	0.90	SW846 8082 PCB	11/8/99 17:08	11/10/99 10:0	TMJ
Aroclor-1248	ND	mg/Kg	0.90	SW846 8082 PCB	11/8/99 17:08	11/10/99 10:0	TMJ
Aroclor-1254	ND	mg/Kg	0.90	SW846 8082 PCB	11/8/99 17:08	11/10/99 10:0	TMJ
Aroclor-1260	ND	mg/Kg	0.90	SW846 8082 PCB	11/8/99 17:08	11/10/99 10:0	TMJ
TCLP METAL ANALYSIS SW-846 Method 1311							
Arsenic	ND	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 19:1	HNL
Barium	0.48	mg/L	0.005	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 19:1	HNL
ium	ND	mg/L	0.005	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 19:1	HNL
Chromium	ND	mg/L	0.05	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 19:1	HNL
Lead	0.31	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 19:1	HNL
Mercury	ND	mg/L	0.0002	SW-846 7470 TCLP	11/10/99 18:40	11/11/99 18:5	JL
Selenium	0.020	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 19:1	HNL
Silver	ND	mg/L	0.01	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 19:1	HNL

Respectfully submitted,
 CT&E Environmental Services, Inc.


 Project Manager, Michigan Division

Reported: 11/16/1999

Qualifiers

- ND Not detected
- B Blank contaminant
- D Dilution
- J Estimated result
- M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

000008



Sample ID: 3992779002 **Matrix:** Non Aqueous Liquid
Client Sample ID: SE-1 **Location:**
Collected: 10/28/99 11:35:00A **Project:** S05-9910-810
Received: 11/2/99 1:36:25PM **Sampled By:** JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
TOTAL METALS ANALYSIS							
Arsenic	ND	mg/Kg	1	SW-846 6010	11/5/99 14:55	11/9/99 17:54	HNL
Barium	54	mg/Kg	0.5	SW-846 6010	11/5/99 14:55	11/9/99 17:54	HNL
Cadmium	ND	mg/Kg	0.1	SW-846 6010	11/5/99 14:55	11/9/99 17:54	HNL
Chromium	38	mg/Kg	2	SW-846 6010	11/5/99 14:55	11/9/99 17:54	HNL
Lead	52	mg/Kg	0.5	SW-846 6010	11/5/99 14:55	11/9/99 17:54	HNL
Mercury	0.030	mg/Kg	0.018	SW-846 7471	11/11/99 14:14	11/12/99 14:3	JL
Selenium	ND	mg/Kg	2	SW-846 6010	11/5/99 14:55	11/9/99 17:54	HNL
Silver	3.3	mg/Kg	0.05	SW-846 6010	11/5/99 14:55	11/9/99 17:54	HNL
GENERAL CHEMISTRY ANALYSIS							
Total Hazardous Halogens	ND	mg/Kg	650	SW-846 8021B	11/9/99 5:53	11/9/99 19:38	ORY
PHYSICAL PROPERTY ANALYSIS							
Flashpoint	>200	degree F		SW-846 1010		11/2/99 14:43	WD
GC VOLATILE ORGANIC ANALYSIS							
1,1,1-Trichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 19:38	ORY
1,1,2-Trichloro-1,2,2-fluoroet	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 19:38	ORY
1,1-Dichloroethylene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 19:38	ORY
1,2-Dichlorobenzene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 19:38	ORY
1,2-Dichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 19:38	ORY
Carbon tetrachloride	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 19:38	ORY
Chloroform	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 19:38	ORY
cis-1,2-Dichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 19:38	ORY
Dichlorodifluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 19:38	ORY
Methylene chloride	ND	mg/Kg	250	SW-846 8021B	11/9/99 5:53	11/9/99 19:38	ORY
Tetrachloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 19:38	ORY
Trichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 19:38	ORY
Trichlorofluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 19:38	ORY

GC/MS SEMIVOLATILE ORGANIC ANALYSIS

Reported: 11/16/199

Qualifiers

ND Not detected
 B Blank contaminant
 D Dilution
 J Estimated result
 M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

00009



Sample ID:	3992779002	Matrix:	Non Aqueous Liquid				
Client Sample ID:	SE-1	Location:					
Collected:	10/28/99 11:35:00A	Project:	S05-9910-810				
Received:	11/2/99 1:36:25PM	Sampled By:	JK				
Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
1,2,4-Trichlorobenzene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
1,2-Dichlorobenzene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
1,3-Dichlorobenzene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
1,4-Dichlorobenzene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
2,4,5-Trichlorophenol	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
2,4,6-Trichlorophenol	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
2,4-Dichlorophenol	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
2,4-Dimethylphenol	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
2,4-Dinitrophenol	ND D,M	mg/Kg	860	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
2,4-Dinitrotoluene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
2,6-Dinitrotoluene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
1,1,2,3-tetrachlorobenzene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
2-Chlorophenol	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
2-Methyl naphthalene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
2-Methyl-4,6-dinitrophenol	ND D,M	mg/Kg	860	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
2-Methylphenol (o-Cresol)	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
2-Nitroaniline	ND D,M	mg/Kg	860	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
2-Nitrophenol	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
3&4-Methylphenol (p&m-Cresol)	ND D,M	mg/Kg	430	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
3,3-Dichlorobenzidine	ND D,M	mg/Kg	860	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
3-Nitroaniline	ND D,M	mg/Kg	860	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
4-Bromophenyl-phenylether	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
4-Chloro-3-methylphenol	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
4-Chloroaniline	ND D,M	mg/Kg	860	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
4-Chlorophenyl-phenylether	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
4-Nitroaniline	ND D,M	mg/Kg	860	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
4-Nitrophenol	ND D,M	mg/Kg	860	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
Acenaphthene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
Acenaphthylene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
Anthracene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
Benzo(a)anthracene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
Benzo[a]pyrene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
Benzo[b]fluoranthene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS

Reported: 11/16/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

- ND Not detected
- B Blank contaminant
- D Dilution
- J Estimated result
- M Matrix interference

000010



Sample ID: 3992779002 **Matrix:** Non Aqueous Liquid
Client Sample ID: SE-1 **Location:**
Collected: 10/28/99 11:35:00A **Project:** S05-9910-810
Received: 11/2/99 1:36:25PM **Sampled By:** JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
Benzo[g,h,i]perylene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
Benzo[k]fluoranthene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
Bis(2-Chloroethoxy)methane	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
Bis(2-Chloroethyl)ether	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
bis(2-chloroisopropyl)ether	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
bis(2-Ethylhexyl)phthalate	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
Butylbenzylphthalate	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
Carbazole	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
Chrysene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
Di-n-butylphthalate	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
di-n-Octylphthalate	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
iso[a,h]anthracene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
Dioxofuran	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
Diethylphthalate	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
Dimethylphthalate	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
Fluoranthene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
Fluorene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
Hexachlorobenzene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
Hexachlorobutadiene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
Hexachlorocyclopentadiene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
Hexachloroethane	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
Indeno[1,2,3-c,d] pyrene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
Isophorone	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
N-Nitroso-di-n-propylamine	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
N-Nitrosodiphenylamine	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
Naphthalene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
Nitrobenzene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
Pentachlorophenol	ND D,M	mg/Kg	860	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
Phenanthrene	300 D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
Phenol	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS
Pyrene	310 D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 16:2	JLS

GC SEMIVOLATILE ORGANIC ANALYSIS

Reported: 11/16/199

Qualifiers	Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01
ND	Not detected
B	Blank contaminant
D	Dilution
J	Estimated result
M	Matrix interference

000011

CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID: 3992779002 **Matrix:** Non Aqueous Liquid
Client Sample ID: SE-1 **Location:**
Collected: 10/28/99 11:35:00A **Project:** S05-9910-810
Received: 11/2/99 1:36:25PM **Sampled By:** JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
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GC SEMIVOLATILE ORGANIC ANALYSIS

Aroclor-1016	ND	mg/Kg	0.87	SW846 8082 PCB	11/8/99 17:08	11/10/99 10:3	TMJ
Aroclor-1221	ND	mg/Kg	0.87	SW846 8082 PCB	11/8/99 17:08	11/10/99 10:3	TMJ
Aroclor-1232	ND	mg/Kg	0.87	SW846 8082 PCB	11/8/99 17:08	11/10/99 10:3	TMJ
Aroclor-1242	ND	mg/Kg	0.87	SW846 8082 PCB	11/8/99 17:08	11/10/99 10:3	TMJ
Aroclor-1248	2.0	mg/Kg	0.87	SW846 8082 PCB	11/8/99 17:08	11/10/99 10:3	TMJ
Aroclor-1254	ND	mg/Kg	0.87	SW846 8082 PCB	11/8/99 17:08	11/10/99 10:3	TMJ
Aroclor-1260	ND	mg/Kg	0.87	SW846 8082 PCB	11/8/99 17:08	11/10/99 10:3	TMJ

TCLP METAL ANALYSIS SW-846 Method 1311

Arsenic	0.024 J,M	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 18:4	HNL
Barium	0.51	mg/L	0.005	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 18:4	HNL
ium	ND	mg/L	0.005	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 18:4	HNL
Chromium	ND	mg/L	0.05	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 18:4	HNL
Lead	ND	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 18:4	HNL
Mercury	ND	mg/L	0.0002	SW-846 7470 TCLP	11/10/99 18:40	11/11/99 18:5	JL
Selenium	0.020	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 18:4	HNL
Silver	ND	mg/L	0.01	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 18:4	HNL

Respectfully submitted,
CT&E Environmental Services, Inc.

Linda C. Lien
 Project Manager, Michigan Division

Reported: 11/16/1999

Qualifiers Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
 B Blank contaminant
 D Dilution
 J Estimated result
 M Matrix interference

000012



Sample ID: 3992779003 Matrix: Non Aqueous Liquid
Client Sample ID: W-1 Location:
Collected: 10/28/99 11:45:00A Project: S05-9910-810
Received: 11/2/99 1:36:25PM Sampled By: JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
TOTAL METALS ANALYSIS							
Arsenic	ND	mg/Kg	1	SW-846 6010	11/5/99 14:55	11/9/99 18:00	HNL
Barium	9.5	mg/Kg	0.5	SW-846 6010	11/5/99 14:55	11/9/99 18:00	HNL
Cadmium	0.24	mg/Kg	0.1	SW-846 6010	11/5/99 14:55	11/9/99 18:00	HNL
Chromium	5.1	mg/Kg	3	SW-846 6010	11/5/99 14:55	11/9/99 18:00	HNL
Lead	19	mg/Kg	0.5	SW-846 6010	11/5/99 14:55	11/9/99 18:00	HNL
Mercury	ND	mg/Kg	0.019	SW-846 7471	11/11/99 14:14	11/12/99 14:3	JL
Selenium	ND	mg/Kg	2	SW-846 6010	11/5/99 14:55	11/9/99 18:00	HNL
Silver	0.19	mg/Kg	0.05	SW-846 6010	11/5/99 14:55	11/11/99 10:2	HNL
GENERAL CHEMISTRY ANALYSIS							
Total Hazardous Halogens	ND	mg/Kg	650	SW-846 8021B	11/9/99 5:53	11/9/99 20:23	ORY
PHYSICAL PROPERTY ANALYSIS							
Flashpoint	>200	degree F		SW-846 1010		11/2/99 14:43	WD
GC VOLATILE ORGANIC ANALYSIS							
1,1,1-Trichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 20:23	ORY
1,1,2-Trichloro-1,2,2-fluoroet	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 20:23	ORY
1,1-Dichloroethylene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 20:23	ORY
1,2-Dichlorobenzene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 20:23	ORY
1,2-Dichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 20:23	ORY
Carbon tetrachloride	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 20:23	ORY
Chloroform	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 20:23	ORY
cis-1,2-Dichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 20:23	ORY
Dichlorodifluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 20:23	ORY
Methylene chloride	ND	mg/Kg	250	SW-846 8021B	11/9/99 5:53	11/9/99 20:23	ORY
Tetrachloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 20:23	ORY
Trichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 20:23	ORY
Trichlorofluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 20:23	ORY

GC/MS SEMIVOLATILE ORGANIC ANALYSIS

Reported: 11/16/1999

Quanifiers Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

000013



Sample ID: 3992779003 **Matrix:** Non Aqueous Liquid
Client Sample ID: W-1 **Location:**
Collected: 10/28/99 11:45:00A **Project:** S05-9910-810
Received: 11/2/99 1:36:25PM **Sampled By:** JK

Test Description	Result	Unit	Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
1,2,4-Trichlorobenzene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
1,2-Dichlorobenzene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
1,3-Dichlorobenzene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
1,4-Dichlorobenzene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
2,4,5-Trichlorophenol	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
2,4,6-Trichlorophenol	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
2,4-Dichlorophenol	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
2,4-Dimethylphenol	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
2,4-Dinitrophenol	ND D,M	mg/Kg	890	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
2,4-Dinitrotoluene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
2,6-Dinitrotoluene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
7-Ioronaphthalene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
2-Chlorophenol	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
2-Methyl naphthalene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
2-Methyl-4,6-dinitrophenol	ND D,M	mg/Kg	890	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
2-Methylphenol (o-Cresol)	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
2-Nitroaniline	ND D,M	mg/Kg	890	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
2-Nitrophenol	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
3&4-Methylphenol (p&m-Cresol)	ND D,M	mg/Kg	450	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
3,3-Dichlorobenzidine	ND D,M	mg/Kg	890	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
3-Nitroaniline	ND D,M	mg/Kg	890	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
4-Bromophenyl-phenylether	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
4-Chloro-3-methylphenol	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
4-Chloroaniline	ND D,M	mg/Kg	890	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
4-Chlorophenyl-phenylether	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
4-Nitroaniline	ND D,M	mg/Kg	890	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
4-Nitrophenol	ND D,M	mg/Kg	890	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
Acenaphthene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
Acenaphthylene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
Anthracene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
Benzo(a)anthracene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
Benzo[a]pyrene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
Benzo[b]fluoranthene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS

Reported: 11/16/199

Qualifiers

- ND Not detected
- B Blank contaminant
- D Dilution
- J Estimated result
- M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

000014



Sample ID: 3992779003 **Matrix:** Non Aqueous Liquid
Client Sample ID: W-1 **Location:**
Collected: 10/28/99 11:45:00A **Project:** S05-9910-810
Received: 11/2/99 1:36:25PM **Sampled By:** JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
Benzo[g,h,i]perylene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
Benzo[k]fluoranthene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
Bis(2-Chloroethoxy)methane	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
Bis(2-Chloroethyl)ether	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
bis(2-chloroisopropyl)ether	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
bis(2-Ethylhexyl)phthalate	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
Butylbenzylphthalate	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
Carbazole	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
Chrysene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
Di-n-butylphthalate	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
di-n-Octylphthalate	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
Fluoranthene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
Indeno[1,2,3-c,d] pyrene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
Isophorone	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
N-Nitroso-di-n-propylamine	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
N-Nitrosodiphenylamine	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
Naphthalene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
Nitrobenzene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
Pentachlorophenol	ND D,M	mg/Kg	890	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
Phenanthrene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
Phenol	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS
Pyrene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 17:1	JLS

GC SEMIVOLATILE ORGANIC ANALYSIS

Reported: 11/16/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
 B Blank contaminant
 D Dilution
 J Estimated result
 M Matrix interference

000015


CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID: 3992779003 **Matrix:** Non Aqueous Liquid
Client Sample ID: W-1 **Location:**
Collected: 10/28/99 11:45:00A **Project:** S05-9910-810
Received: 11/2/99 1:36:25PM **Sampled By:** JK

Test Description	Result	Unit	Limit	Reporting	Prepared	Analyzed	Analyst
				Detection			

GC SEMIVOLATILE ORGANIC ANALYSIS

Aroclor-1016	ND	mg/Kg	0.95	SW846 8082 PCB	11/8/99 17:08	11/10/99 11:0	TMJ
Aroclor-1221	ND	mg/Kg	0.95	SW846 8082 PCB	11/8/99 17:08	11/10/99 11:0	TMJ
Aroclor-1232	ND	mg/Kg	0.95	SW846 8082 PCB	11/8/99 17:08	11/10/99 11:0	TMJ
Aroclor-1242	ND	mg/Kg	0.95	SW846 8082 PCB	11/8/99 17:08	11/10/99 11:0	TMJ
Aroclor-1248	ND	mg/Kg	0.95	SW846 8082 PCB	11/8/99 17:08	11/10/99 11:0	TMJ
Aroclor-1254	ND	mg/Kg	0.95	SW846 8082 PCB	11/8/99 17:08	11/10/99 11:0	TMJ
Aroclor-1260	ND	mg/Kg	0.95	SW846 8082 PCB	11/8/99 17:08	11/10/99 11:0	TMJ

TCLP METAL ANALYSIS SW-846 Method 1311

Arsenic	ND	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 19:1	HNL
Barium	0.26	mg/L	0.005	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 19:1	HNL
Cadmium	ND	mg/L	0.005	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 19:1	HNL
Chromium	ND	mg/L	0.05	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 19:1	HNL
Lead	0.031	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 19:1	HNL
Mercury	ND	mg/L	0.0002	SW-846 7470 TCLP	11/10/99 18:40	11/11/99 18:5	JL
Selenium	0.029	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 19:1	HNL
Silver	ND	mg/L	0.01	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 19:1	HNL

Respectfully submitted,
CT&E Environmental Services, Inc.

Lucy G. Zwick
 Project Manager, Michigan Division

Reported: 11/16/1999

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
 B Blank contaminant
 D Dilution
 J Estimated result
 M Matrix interference

000016



Sample ID:	3992779004	Matrix:	Non Aqueous Liquid
Client Sample ID:	W-1D	Location:	
Collected:	10/28/99 11:45:00A	Project:	S05-9910-810
Received:	11/2/99 1:36:25PM	Sampled By:	JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
TOTAL METALS ANALYSIS							
Arsenic	ND	mg/Kg	1	SW-846 6010	11/5/99 14:55	11/9/99 18:05	HNL
Barium	12	mg/Kg	0.5	SW-846 6010	11/5/99 14:55	11/9/99 18:05	HNL
Cadmium	ND	mg/Kg	0.1	SW-846 6010	11/5/99 14:55	11/9/99 18:05	HNL
Chromium	4.9	mg/Kg	2	SW-846 6010	11/5/99 14:55	11/9/99 18:05	HNL
Lead	20	mg/Kg	0.5	SW-846 6010	11/5/99 14:55	11/9/99 18:05	HNL
Mercury	ND	mg/Kg	0.025	SW-846 7471	11/11/99 14:14	11/12/99 14:3	JL
Selenium	3.4 J.M	mg/Kg	2	SW-846 6010	11/5/99 14:55	11/11/99 10:3	HNL
Silver	0.24	mg/Kg	0.05	SW-846 6010	11/5/99 14:55	11/11/99 10:3	HNL
GENERAL CHEMISTRY ANALYSIS							
Total Hazardous Halogens	ND	mg/Kg	650	SW-846 8021B	11/9/99 5:53	11/9/99 21:08	ORY
PHYSICAL PROPERTY ANALYSIS							
Flashpoint	>200	degree F		SW-846 1010		11/2/99 14:43	WD
GC VOLATILE ORGANIC ANALYSIS							
1,1,1-Trichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 21:08	ORY
1,1,2-Trichloro-1,2,2-fluoroet	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 21:08	ORY
1,1-Dichloroethylene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 21:08	ORY
1,2-Dichlorobenzene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 21:08	ORY
1,2-Dichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 21:08	ORY
Carbon tetrachloride	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 21:08	ORY
Chloroform	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 21:08	ORY
cis-1,2-Dichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 21:08	ORY
Dichlorodifluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 21:08	ORY
Methylene chloride	ND	mg/Kg	250	SW-846 8021B	11/9/99 5:53	11/9/99 21:08	ORY
Tetrachloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 21:08	ORY
Trichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 21:08	ORY
Trichlorofluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 21:08	ORY

GC/MS SEMIVOLATILE ORGANIC ANALYSIS

Reported: 11/16/1999

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

000017



Sample ID: 3992779004 Matrix: Non Aqueous Liquid
Client Sample ID: W-1D Location:
Collected: 10/28/99 11:45:00A Project: S05-9910-810
Received: 11/2/99 1:36:25PM Sampled By: JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
1,2,4-Trichlorobenzene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
1,2-Dichlorobenzene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
1,3-Dichlorobenzene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
1,4-Dichlorobenzene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
2,4,5-Trichlorophenol	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
2,4,6-Trichlorophenol	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
2,4-Dichlorophenol	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
2,4-Dimethylphenol	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
2,4-Dinitrophenol	ND D,M	mg/Kg	870	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
2,4-Dinitrotoluene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
2,6-Dinitrotoluene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
~ Ioronaphthalene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
2-Chlorophenol	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
2-Methyl naphthalene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
2-Methyl-4,6-dinitrophenol	ND D,M	mg/Kg	870	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
2-Methylphenol (o-Cresol)	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
2-Nitroaniline	ND D,M	mg/Kg	870	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
2-Nitrophenol	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
3&4-Methylphenol (p&m-Cresol)	ND D,M	mg/Kg	440	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
3,3-Dichlorobenzidine	ND D,M	mg/Kg	870	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
3-Nitroaniline	ND D,M	mg/Kg	870	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
4-Bromophenyl-phenylether	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
4-Chloro-3-methylphenol	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
4-Chloroaniline	ND D,M	mg/Kg	870	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
4-Chlorophenyl-phenylether	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
4-Nitroaniline	ND D,M	mg/Kg	870	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
4-Nitrophenol	ND D,M	mg/Kg	870	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
Acenaphthene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
Acenaphthylene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
Anthracene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
Benzo(a)anthracene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
Benzo[a]pyrene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
Benzo[b]fluoranthene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS

Reported: 11/16/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

000018



Sample ID: 3992779004 Matrix: Non Aqueous Liquid
Client Sample ID: W-1D Location:
Collected: 10/28/99 11:45:00A Project: S05-9910-810
Received: 11/2/99 1:36:25PM Sampled By: JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
Benzo[g,h,i]perylene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
Benzo[k]fluoranthene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
Bis(2-Chloroethoxy)methane	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
Bis(2-Chloroethyl)ether	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
bis(2-chloroisopropyl)ether	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
bis(2-Ethylhexyl)phthalate	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
Butylbenzylphthalate	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
Carbazole	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
Chrysene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
Di-n-butylphthalate	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
di-n-Octylphthalate	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
benzo[a,h]anthracene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
L,uenzofuran	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
Diethylphthalate	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
Dimethylphthalate	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
Fluoranthene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
Fluorene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
Hexachlorobenzene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
Hexachlorobutadiene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
Hexachlorocyclopentadiene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
Hexachloroethane	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
Indeno[1,2,3-c,d] pyrene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
Isophorone	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
N-Nitroso-di-n-propylamine	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
N-Nitrosodiphenylamine	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
Naphthalene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
Nitrobenzene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
Pentachlorophenol	ND D,M	mg/Kg	870	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
Phenanthrene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
Phenol	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS
Pyrene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/11/99 18:0	JLS

GC SEMIVOLATILE ORGANIC ANALYSIS

Reported: 11/16/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

000019



Sample ID: 3992779004 **Matrix:** Non Aqueous Liquid
Client Sample ID: W-1D **Location:**
Collected: 10/28/99 11:45:00A **Project:** S05-9910-810
Received: 11/2/99 1:36:25PM **Sampled By:** JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
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GC SEMIVOLATILE ORGANIC ANALYSIS

Aroclor-1016	ND	mg/Kg	0.89	SW846 8082 PCB	11/8/99 17:08	11/10/99	11:3	TMJ
Aroclor-1221	ND	mg/Kg	0.89	SW846 8082 PCB	11/8/99 17:08	11/10/99	11:3	TMJ
Aroclor-1232	ND	mg/Kg	0.89	SW846 8082 PCB	11/8/99 17:08	11/10/99	11:3	TMJ
Aroclor-1242	ND	mg/Kg	0.89	SW846 8082 PCB	11/8/99 17:08	11/10/99	11:3	TMJ
Aroclor-1248	ND	mg/Kg	0.89	SW846 8082 PCB	11/8/99 17:08	11/10/99	11:3	TMJ
Aroclor-1254	ND	mg/Kg	0.89	SW846 8082 PCB	11/8/99 17:08	11/10/99	11:3	TMJ
Aroclor-1260	ND	mg/Kg	0.89	SW846 8082 PCB	11/8/99 17:08	11/10/99	11:3	TMJ

TCLP METAL ANALYSIS SW-846 Method 1311

Arsenic	0.029 J,M	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99	19:2	HNL
Barium	0.30	mg/L	0.005	SW-846 6010 TCLP	11/8/99 7:09	11/10/99	19:2	HNL
ium	ND	mg/L	0.005	SW-846 6010 TCLP	11/8/99 7:09	11/10/99	19:2	HNL
Chromium	ND	mg/L	0.05	SW-846 6010 TCLP	11/8/99 7:09	11/10/99	19:2	HNL
Lead	ND	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99	19:2	HNL
Mercury	ND	mg/L	0.0002	SW-846 7470 TCLP	11/10/99 18:40	11/11/99	18:5	JL
Selenium	ND	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99	19:2	HNL
Silver	ND	mg/L	0.01	SW-846 6010 TCLP	11/8/99 7:09	11/10/99	19:2	HNL

Respectfully submitted,
CT&E Environmental Services, Inc.

Lidya J. Dzicic
Project Manager, Michigan Division

Reported: 11/16/1999

Quarriers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
 B Blank contaminant
 D Dilution
 J Estimated result
 M Matrix interference

000020

CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID:	3992779005	Matrix:	Non Aqueous Liquid
Client Sample ID:	TP-1	Location:	
Collected:	10/28/99 11:38:00A	Project:	S05-9910-810
Received:	11/2/99 1:36:25PM	Sampled By:	JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
TOTAL METALS ANALYSIS							
Arsenic	ND	mg/Kg	0.9	SW-846 6010	11/5/99 14:55	11/9/99 18:11	HNL
Barium	11	mg/Kg	0.5	SW-846 6010	11/5/99 14:55	11/9/99 18:11	HNL
Cadmium	0.19	mg/Kg	0.09	SW-846 6010	11/5/99 14:55	11/9/99 18:11	HNL
Chromium	5.0	mg/Kg	2	SW-846 6010	11/5/99 14:55	11/9/99 18:11	HNL
Lead	33	mg/Kg	0.5	SW-846 6010	11/5/99 14:55	11/9/99 18:11	HNL
Mercury	ND	mg/Kg	0.017	SW-846 7471	11/11/99 14:14	11/12/99 14:3	JL
Selenium	ND	mg/Kg	2	SW-846 6010	11/5/99 14:55	11/9/99 18:11	HNL
Silver	0.27 J,M	mg/Kg	0.05	SW-846 6010	11/5/99 14:55	11/11/99 10:3	HNL
GENERAL CHEMISTRY ANALYSIS							
Total Hazardous Halogens	ND	mg/Kg	650	SW-846 8021B	11/9/99 5:53	11/9/99 21:54	ORY
PHYSICAL PROPERTY ANALYSIS							
Flashpoint	>200	degree F		SW-846 1010		11/2/99 14:44	WD
GC VOLATILE ORGANIC ANALYSIS							
1,1,1-Trichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 21:54	ORY
1,1,2-Trichloro-1,2,2-fluoroet	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 21:54	ORY
1,1-Dichloroethylene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 21:54	ORY
1,2-Dichlorobenzene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 21:54	ORY
1,2-Dichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 21:54	ORY
Carbon tetrachloride	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 21:54	ORY
Chloroform	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 21:54	ORY
cis-1,2-Dichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 21:54	ORY
Dichlorodifluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 21:54	ORY
Methylene chloride	ND	mg/Kg	250	SW-846 8021B	11/9/99 5:53	11/9/99 21:54	ORY
Tetrachloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 21:54	ORY
Trichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 21:54	ORY
Trichlorofluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 21:54	ORY

GC/MS SEMIVOLATILE ORGANIC ANALYSIS

Reported: 11/16/199

Qualifiers

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

000021



Sample ID: 3992779005 **Matrix:** Non Aqueous Liquid
Client Sample ID: TP-1 **Location:**
Collected: 10/28/99 11:38:00A **Project:** S05-9910-810
Received: 11/2/99 1:36:25PM **Sampled By:** JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
1,2,4-Trichlorobenzene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
1,2-Dichlorobenzene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
1,3-Dichlorobenzene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
1,4-Dichlorobenzene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
2,4,5-Trichlorophenol	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
2,4,6-Trichlorophenol	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
2,4-Dichlorophenol	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
2,4-Dimethylphenol	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
2,4-Dinitrophenol	ND D,M	mg/Kg	940	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
2,4-Dinitrotoluene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
2,6-Dinitrotoluene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
2-Methylnaphthalene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
2-Chlorophenol	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
2-Methyl naphthalene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
2-Methyl-4,6-dinitrophenol	ND D,M	mg/Kg	940	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
2-Methylphenol (o-Cresol)	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
2-Nitroaniline	ND D,M	mg/Kg	940	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
2-Nitrophenol	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
3&4-Methylphenol (p&m-Cresol)	ND D,M	mg/Kg	470	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
3,3-Dichlorobenzidine	ND D,M	mg/Kg	940	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
3-Nitroaniline	ND D,M	mg/Kg	940	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
4-Bromophenyl-phenylether	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
4-Chloro-3-methylphenol	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
4-Chloroaniline	ND D,M	mg/Kg	940	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
4-Chlorophenyl-phenylether	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
4-Nitroaniline	ND D,M	mg/Kg	940	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
4-Nitrophenol	ND D,M	mg/Kg	940	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
Acenaphthene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
Acenaphthylene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
Anthracene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
Benzo(a)anthracene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
Benzo[a]pyrene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
Benzo[b]fluoranthene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS

Reported: 11/16/1999

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

- ND Not detected
- B Blank contaminant
- D Dilution
- J Estimated result
- M Matrix interference

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CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID:	3992779005	Matrix:	Non Aqueous Liquid				
Client Sample ID:	TP-1	Location:					
Collected:	10/28/99 11:38:00A	Project:	S05-9910-810				
Received:	11/2/99 1:36:25PM	Sampled By:	JK				
Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
Benzo[g,h,i]perylene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
Benzo[k]fluoranthene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
Bis(2-Chloroethoxy)methane	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
Bis(2-Chloroethyl)ether	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
bis(2-chloroisopropyl)ether	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
bis(2-Ethylhexyl)phthalate	410 D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
Butylbenzylphthalate	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
Carbazole	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
Chrysene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
Di-n-butylphthalate	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
di-n-Octylphthalate	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
endo[a,h]anthracene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
Luenzofuran	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
Diethylphthalate	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
Dimethylphthalate	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
Fluoranthene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
Fluorene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
Hexachlorobenzene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
Hexachlorobutadiene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
Hexachlorocyclopentadiene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
Hexachloroethane	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
Indeno[1,2,3-c,d] pyrene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
Isophorone	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
N-Nitroso-di-n-propylamine	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
N-Nitrosodiphenylamine	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
Naphthalene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
Nitrobenzene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
Pentachlorophenol	ND D,M	mg/Kg	940	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
Phenanthrene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
Phenol	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS
Pyrene	260 D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/11/99 19:0	JLS

GC SEMIVOLATILE ORGANIC ANALYSIS

Reported: 11/16/1999

Quanifiers Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
 B Blank contaminant
 D Dilution
 J Estimated result
 M Matrix interference

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CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID: 3992779005 **Matrix:** Non Aqueous Liquid
Client Sample ID: TP-1 **Location:**
Collected: 10/28/99 11:38:00A **Project:** S05-9910-810
Received: 11/2/99 1:36:25PM **Sampled By:** JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
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GC SEMIVOLATILE ORGANIC ANALYSIS

Aroclor-1016	ND	mg/Kg	0.95	SW846 8082 PCB	11/8/99 17:12	11/10/99 11:5	TMJ
Aroclor-1221	ND	mg/Kg	0.95	SW846 8082 PCB	11/8/99 17:12	11/10/99 11:5	TMJ
Aroclor-1232	ND	mg/Kg	0.95	SW846 8082 PCB	11/8/99 17:12	11/10/99 11:5	TMJ
Aroclor-1242	ND	mg/Kg	0.95	SW846 8082 PCB	11/8/99 17:12	11/10/99 11:5	TMJ
Aroclor-1248	1.1	mg/Kg	0.95	SW846 8082 PCB	11/8/99 17:12	11/10/99 11:5	TMJ
Aroclor-1254	ND	mg/Kg	0.95	SW846 8082 PCB	11/8/99 17:12	11/10/99 11:5	TMJ
Aroclor-1260	ND	mg/Kg	0.95	SW846 8082 PCB	11/8/99 17:12	11/10/99 11:5	TMJ

TCLP METAL ANALYSIS SW-846 Method 1311

Arsenic	ND	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 19:2	HNL
Barium	0.59	mg/L	0.005	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 19:2	HNL
ium	ND	mg/L	0.005	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 19:2	HNL
Chromium	ND	mg/L	0.05	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 19:2	HNL
Lead	ND	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 19:2	HNL
Mercury	ND	mg/L	0.0002	SW-846 7470 TCLP	11/10/99 18:40	11/11/99 18:5	JL
Selenium	0.020	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 19:2	HNL
Silver	ND	mg/L	0.01	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 19:2	HNL

Respectfully submitted,
CT&E Environmental Services, Inc.

Linda A. Davis
Project Manager, Michigan Division

Reported: 11/16/199

Certifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
 B Blank contaminant
 D Dilution
 J Estimated result
 M Matrix interference

000024

CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID:	3992779006	Matrix:	Non Aqueous Liquid				
Client Sample ID:	D-1	Location:					
Collected:	10/28/99 11:50:00A	Project:	S05-9910-810				
Received:	11/2/99 1:36:25PM	Sampled By:	JK				
Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
TOTAL METALS ANALYSIS							
Arsenic	ND	mg/Kg	0.9	SW-846 6010	11/5/99 14:55	11/9/99 18:16	HNL
Barium	0.93	mg/Kg	0.5	SW-846 6010	11/5/99 14:55	11/9/99 18:16	HNL
Cadmium	0.38	mg/Kg	0.09	SW-846 6010	11/5/99 14:55	11/9/99 18:16	HNL
Chromium	ND	mg/Kg	2	SW-846 6010	11/5/99 14:55	11/9/99 18:16	HNL
Lead	1.1	mg/Kg	0.5	SW-846 6010	11/5/99 14:55	11/9/99 18:16	HNL
Mercury	ND	mg/Kg	0.019	SW-846 7471	11/11/99 14:14	11/12/99 14:3	JL
Selenium	3.2	mg/Kg	2	SW-846 6010	11/5/99 14:55	11/9/99 18:16	HNL
Silver	0.059 J,M	mg/Kg	0.05	SW-846 6010	11/5/99 14:55	11/11/99 10:4	HNL
GENERAL CHEMISTRY ANALYSIS							
Total Hazardous Halogens	ND	mg/Kg	650	SW-846 8021B	11/9/99 5:53	11/9/99 22:39	ORY
PHYSICAL PROPERTY ANALYSIS							
Flashpoint	>200	degree F		SW-846 1010		11/2/99 14:44	WD
GC VOLATILE ORGANIC ANALYSIS							
1,1,1-Trichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 22:39	ORY
1,1,2-Trichloro-1,2,2-fluoroet	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 22:39	ORY
1,1-Dichloroethylene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 22:39	ORY
1,2-Dichlorobenzene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 22:39	ORY
1,2-Dichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 22:39	ORY
Carbon tetrachloride	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 22:39	ORY
Chloroform	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 22:39	ORY
cis-1,2-Dichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 22:39	ORY
Dichlorodifluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 22:39	ORY
Methylene chloride	ND	mg/Kg	250	SW-846 8021B	11/9/99 5:53	11/9/99 22:39	ORY
Tetrachloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 22:39	ORY
Trichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 22:39	ORY
Trichlorofluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 22:39	ORY

GC/MS SEMIVOLATILE ORGANIC ANALYSIS

Reported: 11/16/199

Qualifiers

ND Not detected
 B Blank contaminant
 D Dilution
 J Estimated result
 M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

000025

CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID:	3992779006	Matrix:	Non Aqueous Liquid				
Client Sample ID:	D-1	Location:					
Collected:	10/28/99 11:50:00A	Project:	S05-9910-810				
Received:	11/2/99 1:36:25PM	Sampled By:	JK				
Test Description	Result	Unit	Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
1,2,4-Trichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
1,2-Dichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
1,3-Dichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
1,4-Dichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
2,4,5-Trichlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
2,4,6-Trichlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
2,4-Dichlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
2,4-Dimethylphenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
2,4-Dinitrophenol	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
2,4-Dinitrotoluene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
2,6-Dinitrotoluene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
? Chloronaphthalene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
? Chlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
2-Methyl naphthalene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
2-Methyl-4,6-dinitrophenol	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
2-Methylphenol (o-Cresol)	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
2-Nitroaniline	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
2-Nitrophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
3&4-Methylphenol (p&m-Cresol)	ND D,M	mg/Kg	490	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
3,3-Dichlorobenzidine	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
3-Nitroaniline	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
4-Bromophenyl-phenylether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
4-Chloro-3-methylphenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
4-Chloroaniline	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
4-Chlorophenyl-phenylether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
4-Nitroaniline	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
4-Nitrophenol	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
Acenaphthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
Acenaphthylene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
Anthracene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
Benzo(a)anthracene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
Benzo[a]pyrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
Benzo[b]fluoranthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS

Reported: 11/16/1999

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
 B Blank contaminant
 D Dilution
 J Estimated result
 M Matrix interference

000026

CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID:	3992779006	Matrix:	Non Aqueous Liquid
Client Sample ID:	D-1	Location:	
Collected:	10/28/99 11:50:00A	Project:	S05-9910-810
Received:	11/2/99 1:36:25PM	Sampled By:	JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
Benzene[g,h,i]perylene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
Benzo[k]fluoranthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
Bis(2-Chloroethoxy)methane	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
Bis(2-Chloroethyl)ether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
bis(2-chloroisopropyl)ether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
bis(2-Ethylhexyl)phthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
Butylbenzylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
Carbazole	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
Chrysene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
Di-n-butylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
di-n-Octylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
endo[a,h]anthracene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
L-zenofuran	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
Diethylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
Dimethylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
Fluoranthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
Fluorene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
Hexachlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
Hexachlorobutadiene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
Hexachlorocyclopentadiene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
Hexachloroethane	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
Indeno[1,2,3-c,d] pyrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
Isophorone	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
N-Nitroso-di-n-propylamine	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
N-Nitrosodiphenylamine	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
Naphthalene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
Nitrobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
Pentachlorophenol	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
Phenanthrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
Phenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS
Pyrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 19:5	JLS

GC SEMIVOLATILE ORGANIC ANALYSIS

Reported: 11/16/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
 B Blank contaminant
 D Dilution
 J Estimated result
 M Matrix interference

000027

CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID: 3992779006 **Matrix:** Non Aqueous Liquid
Client Sample ID: D-1 **Location:**
Collected: 10/28/99 11:50:00A **Project:** S05-9910-810
Received: 11/2/99 1:36:25PM **Sampled By:** JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
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GC SEMIVOLATILE ORGANIC ANALYSIS

Aroclor-1016	ND	mg/Kg	0.98	SW846 8082 PCB	11/8/99 17:12	11/10/99	16:2 TMJ
Aroclor-1221	ND	mg/Kg	0.98	SW846 8082 PCB	11/8/99 17:12	11/10/99	16:2 TMJ
Aroclor-1232	ND	mg/Kg	0.98	SW846 8082 PCB	11/8/99 17:12	11/10/99	16:2 TMJ
Aroclor-1242	ND	mg/Kg	0.98	SW846 8082 PCB	11/8/99 17:12	11/10/99	16:2 TMJ
Aroclor-1248	ND	mg/Kg	0.98	SW846 8082 PCB	11/8/99 17:12	11/10/99	16:2 TMJ
Aroclor-1254	ND	mg/Kg	0.98	SW846 8082 PCB	11/8/99 17:12	11/10/99	16:2 TMJ
Aroclor-1260	ND	mg/Kg	0.98	SW846 8082 PCB	11/8/99 17:12	11/10/99	16:2 TMJ

TCLP METAL ANALYSIS SW-846 Method 1311

Arsenic	ND	mg/L	0.1	SW-846 6010 TCLP	11/8/99 7:09	11/10/99	19:5 HNL
Barium	0.25	mg/L	0.03	SW-846 6010 TCLP	11/8/99 7:09	11/10/99	19:5 HNL
ium	ND	mg/L	0.03	SW-846 6010 TCLP	11/8/99 7:09	11/10/99	19:5 HNL
Chromium	ND	mg/L	0.3	SW-846 6010 TCLP	11/8/99 7:09	11/10/99	19:5 HNL
Lead	ND	mg/L	0.1	SW-846 6010 TCLP	11/8/99 7:09	11/10/99	19:5 HNL
Mercury	ND M	mg/L	0.003	SW-846 7470 TCLP	11/10/99 18:40	11/11/99	18:5 JL
Selenium	ND	mg/L	0.1	SW-846 6010 TCLP	11/8/99 7:09	11/10/99	19:5 HNL
Silver	ND	mg/L	0.05	SW-846 6010 TCLP	11/8/99 7:09	11/10/99	19:5 HNL

Respectfully submitted,
CT&E Environmental Services, Inc.


 Project Manager, Michigan Division

Reported: 11/16/1999

Qualifiers	Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01
ND	Not detected
B	Blank contaminant
D	Dilution
J	Estimated result
M	Matrix interference

000028

CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID:	3992779007	Matrix:	Non Aqueous Liquid				
Client Sample ID:	SO-1	Location:					
Collected:	10/28/99 11:55:00A	Project:	S05-9910-810				
Received:	11/2/99 1:36:25PM	Sampled By:	JK				
Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
TOTAL METALS ANALYSIS							
Arsenic	ND	mg/Kg	0.8	SW-846 6010	11/5/99 14:55	11/9/99 18:22	HNL
Barium	3.6	mg/Kg	0.4	SW-846 6010	11/5/99 14:55	11/9/99 18:22	HNL
Cadmium	ND	mg/Kg	0.08	SW-846 6010	11/5/99 14:55	11/9/99 18:22	HNL
Chromium	ND	mg/Kg	2	SW-846 6010	11/5/99 14:55	11/9/99 18:22	HNL
Lead	6.8	mg/Kg	0.4	SW-846 6010	11/5/99 14:55	11/9/99 18:22	HNL
Mercury	ND	mg/Kg	0.017	SW-846 7471	11/11/99 14:14	11/12/99 14:3	JL
Selenium	ND	mg/Kg	2	SW-846 6010	11/5/99 14:55	11/9/99 18:22	HNL
Silver	0.13 J,M	mg/Kg	0.04	SW-846 6010	11/5/99 14:55	11/11/99 10:4	HNL
GENERAL CHEMISTRY ANALYSIS							
Total Hazardous Halogens	ND	mg/Kg	650	SW-846 8021B	11/9/99 5:53	11/9/99 23:25	ORY
PHYSICAL PROPERTY ANALYSIS							
Flashpoint	>200	degree F		SW-846 1010		11/2/99 14:44	WD
GC VOLATILE ORGANIC ANALYSIS							
1,1,1-Trichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 23:25	ORY
1,1,2-Trichloro-1,2,2-fluoroet	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 23:25	ORY
1,1-Dichloroethylene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 23:25	ORY
1,2-Dichlorobenzene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 23:25	ORY
1,2-Dichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 23:25	ORY
Carbon tetrachloride	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 23:25	ORY
Chloroform	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 23:25	ORY
cis-1,2-Dichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 23:25	ORY
Dichlorodifluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 23:25	ORY
Methylene chloride	ND	mg/Kg	250	SW-846 8021B	11/9/99 5:53	11/9/99 23:25	ORY
Tetrachloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 23:25	ORY
Trichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 23:25	ORY
Trichlorofluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/9/99 23:25	ORY

GC/MS SEMIVOLATILE ORGANIC ANALYSIS

Reported: 11/16/1999

Qualifiers Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

000029

CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID: 3992779007 **Matrix:** Non Aqueous Liquid
Client Sample ID: SO-1 **Location:**
Collected: 10/28/99 11:55:00A **Project:** S05-9910-810
Received: 11/2/99 1:36:25PM **Sampled By:** JK

Test Description	Result	Unit	Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
1,2,4-Trichlorobenzene	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
1,2-Dichlorobenzene	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
1,3-Dichlorobenzene	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
1,4-Dichlorobenzene	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
2,4,5-Trichlorophenol	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
2,4,6-Trichlorophenol	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
2,4-Dichlorophenol	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
2,4-Dimethylphenol	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
2,4-Dinitrophenol	ND D,M	mg/Kg	790	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
2,4-Dinitrotoluene	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
2,6-Dinitrotoluene	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
1,1,2-Toronaphthalene	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
2-Chlorophenol	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
2-Methyl naphthalene	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
2-Methyl-4,6-dinitrophenol	ND D,M	mg/Kg	790	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
2-Methylphenol (o-Cresol)	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
2-Nitroaniline	ND D,M	mg/Kg	790	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
2-Nitrophenol	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
3&4-Methylphenol (p&m-Cresol)	ND D,M	mg/Kg	390	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
3,3-Dichlorobenzidine	ND D,M	mg/Kg	790	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
3-Nitroaniline	ND D,M	mg/Kg	790	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
4-Bromophenyl-phenylether	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
4-Chloro-3-methylphenol	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
4-Chloroaniline	ND D,M	mg/Kg	790	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
4-Chlorophenyl-phenylether	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
4-Nitroaniline	ND D,M	mg/Kg	790	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
4-Nitrophenol	ND D,M	mg/Kg	790	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
Acenaphthene	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
Acenaphthylene	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
Anthracene	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
Benzo(a)anthracene	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
Benzo[a]pyrene	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
Benzo[b]fluoranthene	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS

Reported: 11/16/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
 B Blank contaminant
 D Dilution
 J Estimated result
 M Matrix interference

000030

CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID: 3992779007 **Matrix:** Non Aqueous Liquid
Client Sample ID: SO-1 **Location:**
Collected: 10/28/99 11:55:00A **Project:** S05-9910-810
Received: 11/2/99 1:36:25PM **Sampled By:** JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
Benzene	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
Benzo[g,h,i]perylene	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
Benzo[k]fluoranthene	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
Bis(2-Chloroethoxy)methane	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
Bis(2-Chloroethyl)ether	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
bis(2-chloroisopropyl)ether	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
bis(2-Ethylhexyl)phthalate	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
Butylbenzylphthalate	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
Carbazole	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
Chrysene	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
Di-n-butylphthalate	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
di-n-Octylphthalate	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
endo[a,h]anthracene	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
L,uenzofuran	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
Diethylphthalate	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
Dimethylphthalate	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
Fluoranthene	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
Fluorene	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
Hexachlorobenzene	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
Hexachlorobutadiene	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
Hexachlorocyclopentadiene	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
Hexachloroethane	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
Indeno[1,2,3-c,d] pyrene	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
Isophorone	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
N-Nitroso-di-n-propylamine	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
N-Nitrosodiphenylamine	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
Naphthalene	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
Nitrobenzene	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
Pentachlorophenol	ND D,M	mg/Kg	790	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
Phenanthrene	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
Phenol	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS
Pyrene	ND D,M	mg/Kg	200	SW-846 8270	11/10/99 16:53	11/11/99 20:5	JLS

GC SEMIVOLATILE ORGANIC ANALYSIS

Reported: 11/16/199

Qualifiers

ND Not detected
 B Blank contaminant
 D Dilution
 J Estimated result
 M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

000031

CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID: 3992779007 **Matrix:** Non Aqueous Liquid
Client Sample ID: SO-1 **Location:**
Collected: 10/28/99 11:55:00A **Project:** S05-9910-810
Received: 11/2/99 1:36:25PM **Sampled By:** JK

Test Description	Result	Unit	Limit	Method	Reporting	Prepared	Analyzed	Analyst
					Detection			

GC SEMIVOLATILE ORGANIC ANALYSIS

Aroclor-1016	ND	mg/Kg	0.95	SW846 8082 PCB	11/8/99 17:12	11/10/99 16:5	TMJ
Aroclor-1221	ND	mg/Kg	0.95	SW846 8082 PCB	11/8/99 17:12	11/10/99 16:5	TMJ
Aroclor-1232	ND	mg/Kg	0.95	SW846 8082 PCB	11/8/99 17:12	11/10/99 16:5	TMJ
Aroclor-1242	ND	mg/Kg	0.95	SW846 8082 PCB	11/8/99 17:12	11/10/99 16:5	TMJ
Aroclor-1248	ND	mg/Kg	0.95	SW846 8082 PCB	11/8/99 17:12	11/10/99 16:5	TMJ
Aroclor-1254	ND	mg/Kg	0.95	SW846 8082 PCB	11/8/99 17:12	11/10/99 16:5	TMJ
Aroclor-1260	ND	mg/Kg	0.95	SW846 8082 PCB	11/8/99 17:12	11/10/99 16:5	TMJ

TCLP METAL ANALYSIS SW-846 Method 1311

Arsenic	ND	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:0	HNL
Barium	0.53	mg/L	0.005	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:0	HNL
ium	ND	mg/L	0.005	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:0	HNL
Chromium	ND	mg/L	0.05	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:0	HNL
Lead	ND	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:0	HNL
Mercury	ND	mg/L	0.0002	SW-846 7470 TCLP	11/10/99 18:40	11/11/99 18:5	JL
Selenium	0.058	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:0	HNL
Silver	ND	mg/L	0.01	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:0	HNL

Respectfully submitted,
CT&E Environmental Services, Inc.

Linda C. Dize
 Project Manager, Michigan Division

Reported: 11/16/199

Qualifiers

ND Not detected
 B Blank contaminant
 D Dilution
 J Estimated result
 M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

000032



CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID:	3992779008	Matrix:	Non Aqueous Liquid
Client Sample ID:	T-4	Location:	
Collected:	10/28/99 12:00:00PM	Project:	S05-9910-810
Received:	11/2/99 1:36:25PM	Sampled By:	JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
TOTAL METALS ANALYSIS							
Arsenic	ND	mg/Kg	1	SW-846 6010	11/5/99 14:55	11/9/99 18:28	HNL
Barium	1.3	mg/Kg	0.5	SW-846 6010	11/5/99 14:55	11/9/99 18:28	HNL
Cadmium	0.36	mg/Kg	0.1	SW-846 6010	11/5/99 14:55	11/9/99 18:28	HNL
Chromium	ND	mg/Kg	2	SW-846 6010	11/5/99 14:55	11/9/99 18:28	HNL
Lead	3.2	mg/Kg	0.5	SW-846 6010	11/5/99 14:55	11/9/99 18:28	HNL
Mercury	ND	mg/Kg	0.019	SW-846 7471	11/11/99 14:14	11/12/99 14:3	JL
Selenium	4.1 J,M	mg/Kg	2	SW-846 6010	11/5/99 14:55	11/9/99 18:28	HNL
Silver	ND	mg/Kg	0.05	SW-846 6010	11/5/99 14:55	11/9/99 18:28	HNL
GENERAL CHEMISTRY ANALYSIS							
Total Hazardous Halogens	ND	mg/Kg	650	SW-846 8021B	11/9/99 5:53	11/10/99 0:10	ORY
PHYSICAL PROPERTY ANALYSIS							
Flashpoint	65	degree F		SW-846 1010		11/2/99 14:45	WD
GC VOLATILE ORGANIC ANALYSIS							
1,1,1-Trichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 0:10	ORY
1,1,2-Trichloro-1,2,2-fluoroet	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 0:10	ORY
1,1-Dichloroethylene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 0:10	ORY
1,2-Dichlorobenzene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 0:10	ORY
1,2-Dichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 0:10	ORY
Carbon tetrachloride	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 0:10	ORY
Chloroform	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 0:10	ORY
cis-1,2-Dichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 0:10	ORY
Dichlorodifluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 0:10	ORY
Methylene chloride	ND	mg/Kg	250	SW-846 8021B	11/9/99 5:53	11/10/99 0:10	ORY
Tetrachloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 0:10	ORY
Trichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 0:10	ORY
Trichlorofluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 0:10	ORY

GC/MS SEMIVOLATILE ORGANIC ANALYSIS

Reported: 11/16/199

Certifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

000033

CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID: 3992779008 **Matrix:** Non Aqueous Liquid
Client Sample ID: T-4 **Location:**
Collected: 10/28/99 12:00:00PM **Project:** S05-9910-810
Received: 11/2/99 1:36:25PM **Sampled By:** JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
1,2,4-Trichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
1,2-Dichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
1,3-Dichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
1,4-Dichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
2,4,5-Trichlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
2,4,6-Trichlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
2,4-Dichlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
2,4-Dimethylphenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
2,4-Dinitrophenol	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
2,4-Dinitrotoluene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
2,6-Dinitrotoluene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
7-floronaphthalene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
2-Chlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
2-Methyl naphthalene	1800 D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
2-Methyl-4,6-dinitrophenol	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
2-Methylphenol (o-Cresol)	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
2-Nitroaniline	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
2-Nitrophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
3&4-Methylphenol (p&m-Cresol)	ND D,M	mg/Kg	490	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
3,3-Dichlorobenzidine	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
3-Nitroaniline	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
4-Bromophenyl-phenylether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
4-Chloro-3-methylphenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
4-Chloroaniline	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
4-Chlorophenyl-phenylether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
4-Nitroaniline	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
4-Nitrophenol	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
Acenaphthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
Acenaphthylene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
Anthracene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
Benzo(a)anthracene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
Benzo[a]pyrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
Benzo[b]fluoranthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS

Reported: 11/16/199

Quarriers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
 B Blank contaminant
 D Dilution
 J Estimated result
 M Matrix interference

000034

CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID:	3992779008	Matrix:	Non Aqueous Liquid				
Client Sample ID:	T-4	Location:					
Collected:	10/28/99 12:00:00PM	Project:	S05-9910-810				
Received:	11/2/99 1:36:25PM	Sampled By:	JK				
Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
Benzo[g,h,i]perylene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
Benzo[k]fluoranthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
Bis(2-Chloroethoxy)methane	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
Bis(2-Chloroethyl)ether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
bis(2-chloroisopropyl)ether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
bis(2-Ethylhexyl)phthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
Butylbenzylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
Carbazole	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
Chrysene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
Di-n-butylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
di-n-Octylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
nzo[a,h]anthracene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
Luenzofuran	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
Diethylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
Dimethylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
Fluoranthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
Fluorene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
Hexachlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
Hexachlorobutadiene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
Hexachlorocyclopentadiene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
Hexachloroethane	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
Indeno[1,2,3-c,d] pyrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
Isophorone	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
N-Nitroso-di-n-propylamine	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
N-Nitrosodiphenylamine	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
Naphthalene	1100 D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
Nitrobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
Pentachlorophenol	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
Phenanthrene	920 D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
Phenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS
Pyrene	380 D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/11/99 21:4	JLS

GC SEMIVOLATILE ORGANIC ANALYSIS

Reported: 11/16/1999

Quantifiers Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

000035



CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID:	3992779008	Matrix:	Non Aqueous Liquid
Client Sample ID:	T-4	Location:	
Collected:	10/28/99 12:00:00PM	Project:	S05-9910-810
Received:	11/2/99 1:36:25PM	Sampled By:	JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
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GC SEMIVOLATILE ORGANIC ANALYSIS

Aroclor-1016	ND	mg/Kg	0.99	SW846 8082 PCB	11/8/99 17:12	11/10/99 17:2	TMJ
Aroclor-1221	ND	mg/Kg	0.99	SW846 8082 PCB	11/8/99 17:12	11/10/99 17:2	TMJ
Aroclor-1232	ND	mg/Kg	0.99	SW846 8082 PCB	11/8/99 17:12	11/10/99 17:2	TMJ
Aroclor-1242	ND	mg/Kg	0.99	SW846 8082 PCB	11/8/99 17:12	11/10/99 17:2	TMJ
Aroclor-1248	ND	mg/Kg	0.99	SW846 8082 PCB	11/8/99 17:12	11/10/99 17:2	TMJ
Aroclor-1254	ND	mg/Kg	0.99	SW846 8082 PCB	11/8/99 17:12	11/10/99 17:2	TMJ
Aroclor-1260	ND	mg/Kg	0.99	SW846 8082 PCB	11/8/99 17:12	11/10/99 17:2	TMJ

TCLP METAL ANALYSIS SW-846 Method 1311

Arsenic	ND	mg/L	2	SW-846 6010 TCLP	11/9/99 9:02	11/9/99 16:08	HNL
Barium	0.89	mg/L	0.5	SW-846 6010 TCLP	11/9/99 9:02	11/9/99 16:08	HNL
Manganese	ND	mg/L	0.5	SW-846 6010 TCLP	11/9/99 9:02	11/9/99 16:08	HNL
Chromium	ND	mg/L	5	SW-846 6010 TCLP	11/9/99 9:02	11/9/99 16:08	HNL
Lead	3.3	mg/L	2	SW-846 6010 TCLP	11/9/99 9:02	11/9/99 16:08	HNL
Mercury	ND D,M	mg/L	0.02	SW-846 7470 TCLP	11/10/99 18:40	11/11/99 18:5	JL
Selenium	0.39	mg/L	0.2	SW-846 7740 TCLP	11/9/99 9:04	11/15/99 10:0	SPE
Silver	ND	mg/L	1	SW-846 6010 TCLP	11/9/99 9:02	11/9/99 16:08	HNL

Respectfully submitted,
CT&E Environmental Services, Inc.



Project Manager Michigan Division

Reported: 11/16/1999

Qualifiers

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

000036



Sample ID:	3992779009	Matrix:	Non Aqueous Liquid			
Client Sample ID:	T-13	Location:				
Collected:	10/28/99 12:05:00PM	Project:	S05-9910-810			
Received:	11/2/99 1:36:25PM	Sampled By:	JK			
Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed Analyst
TOTAL METALS ANALYSIS						
Arsenic	ND	mg/Kg	0.5	SW-846 6010	11/5/99 14:55	11/9/99 18:51 HNL
Barium	0.93	mg/Kg	0.2	SW-846 6010	11/5/99 14:55	11/9/99 18:51 HNL
Cadmium	ND	mg/Kg	0.05	SW-846 6010	11/5/99 14:55	11/9/99 18:51 HNL
Chromium	1.2	mg/Kg	1	SW-846 6010	11/5/99 14:55	11/9/99 18:51 HNL
Lead	0.77	mg/Kg	0.2	SW-846 6010	11/5/99 14:55	11/9/99 18:51 HNL
Mercury	ND	mg/Kg	0.019	SW-846 7471	11/11/99 14:14	11/12/99 14:3 JL
Selenium	ND	mg/Kg	1	SW-846 6010	11/5/99 14:55	11/9/99 18:51 HNL
Silver	0.089 JM	mg/Kg	0.02	SW-846 6010	11/5/99 14:55	11/11/99 10:5 HNL
GENERAL CHEMISTRY ANALYSIS						
Total Hazardous Halogens	ND	mg/Kg	650	SW-846 8021B	11/9/99 5:53	11/10/99 15:3 ORY
PHYSICAL PROPERTY ANALYSIS						
Flashpoint	>200	degree F		SW-846 1010		11/3/99 14:47 WD
GC VOLATILE ORGANIC ANALYSIS						
1,1,1-Trichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 15:3 ORY
1,1,2-Trichloro-1,2,2-fluoroet	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 15:3 ORY
1,1-Dichloroethylene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 15:3 ORY
1,2-Dichlorobenzene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 15:3 ORY
1,2-Dichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 15:3 ORY
Carbon tetrachloride	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 15:3 ORY
Chloroform	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 15:3 ORY
cis-1,2-Dichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 15:3 ORY
Dichlorodifluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 15:3 ORY
Methylene chloride	ND	mg/Kg	250	SW-846 8021B	11/9/99 5:53	11/10/99 15:3 ORY
Tetrachloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 15:3 ORY
Trichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 15:3 ORY
Trichlorofluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 15:3 ORY
GC/MS SEMIVOLATILE ORGANIC ANALYSIS						

Reported: 11/16/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

- ND Not detected
- B Blank contaminant
- D Dilution
- J Estimated result
- M Matrix interference

000037



Sample ID: 3992779009 Matrix: Non Aqueous Liquid
Client Sample ID: T-13 Location:
Collected: 10/28/99 12:05:00PM Project: S05-9910-810
Received: 11/2/99 1:36:25PM Sampled By: JK

Test Description	Result	Unit	Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
1,2,4-Trichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
1,2-Dichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
1,3-Dichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
1,4-Dichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
2,4,5-Trichlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
2,4,6-Trichlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
2,4-Dichlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
2,4-Dimethylphenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
2,4-Dinitrophenol	ND D,M	mg/Kg	1000	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
2,4-Dinitrotoluene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
2,6-Dinitrotoluene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
2-Methylnaphthalene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
2-Methyl-4,6-dinitrophenol	ND D,M	mg/Kg	1000	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
2-Methylphenol (o-Cresol)	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
2-Nitroaniline	ND D,M	mg/Kg	1000	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
2-Nitrophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
3&4-Methylphenol (p&m-Cresol)	ND D,M	mg/Kg	500	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
3,3-Dichlorobenzidine	ND D,M	mg/Kg	1000	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
3-Nitroaniline	ND D,M	mg/Kg	1000	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
4-Bromophenyl-phenylether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
4-Chloro-3-methylphenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
4-Chloroaniline	ND D,M	mg/Kg	1000	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
4-Chlorophenyl-phenylether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
4-Nitroaniline	ND D,M	mg/Kg	1000	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
4-Nitrophenol	ND D,M	mg/Kg	1000	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
Acenaphthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
Acenaphthylene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
Anthracene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
Benzo(a)anthracene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
Benzo[a]pyrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
Benzo[b]fluoranthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS

Reported: 11/16/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

- ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

000038



Sample ID:	3992779009	Matrix:	Non Aqueous Liquid		
Client Sample ID:	T-13	Location:			
Collected:	10/28/99 12:05:00PM	Project:	S05-9910-810		
Received:	11/2/99 1:36:25PM	Sampled By:	JK		

Test Description	Result	Unit	Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
Benzofluoranthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
Benzofluoranthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
Bis(2-Chloroethoxy)methane	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
Bis(2-Chloroethyl)ether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
bis(2-chloroisopropyl)ether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
bis(2-Ethylhexyl)phthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
Butylbenzylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
Carbazole	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
Chrysene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
Di-n-butylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
di-n-Octylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
benzo[a,h]anthracene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
Luenzofuran	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
Diethylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
Dimethylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
Fluoranthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
Fluorene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
Hexachlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
Hexachlorobutadiene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
Hexachlorocyclopentadiene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
Hexachloroethane	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
Indeno[1,2,3-c,d] pyrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
Isophorone	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
N-Nitroso-di-n-propylamine	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
N-Nitrosodiphenylamine	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
Naphthalene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
Nitrobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
Pentachlorophenol	ND D,M	mg/Kg	1000	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
Phenanthrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
Phenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS
Pyrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 13:1	JLS

GC SEMIVOLATILE ORGANIC ANALYSIS

Reported: 11/16/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

000039



Sample ID:	3992779009	Matrix:	Non Aqueous Liquid
Client Sample ID:	T-13	Location:	
Collected:	10/28/99 12:05:00PM	Project:	S05-9910-810
Received:	11/2/99 1:36:25PM	Sampled By:	JK

Test Description	Result	Unit	Limit	Method	Prepared	Analyzed	Analyst
GC SEMIVOLATILE ORGANIC ANALYSIS							
Aroclor-1016	ND	mg/Kg	0.99	SW846 8082 PCB	11/4/99 8:09	11/10/99	4:47 TMJ
Aroclor-1221	ND	mg/Kg	0.99	SW846 8082 PCB	11/4/99 8:09	11/10/99	4:47 TMJ
Aroclor-1232	ND	mg/Kg	0.99	SW846 8082 PCB	11/4/99 8:09	11/10/99	4:47 TMJ
Aroclor-1242	ND	mg/Kg	0.99	SW846 8082 PCB	11/4/99 8:09	11/10/99	4:47 TMJ
Aroclor-1248	ND	mg/Kg	0.99	SW846 8082 PCB	11/4/99 8:09	11/10/99	4:47 TMJ
Aroclor-1254	ND	mg/Kg	0.99	SW846 8082 PCB	11/4/99 8:09	11/10/99	4:47 TMJ
Aroclor-1260	ND	mg/Kg	0.99	SW846 8082 PCB	11/4/99 8:09	11/10/99	4:47 TMJ
TCLP METAL ANALYSIS SW-846 Method 1311							
Arsenic	ND	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99	20:1 HNL
Barium	0.20	mg/L	0.005	SW-846 6010 TCLP	11/8/99 7:09	11/10/99	20:1 HNL
Cadmium	ND	mg/L	0.005	SW-846 6010 TCLP	11/8/99 7:09	11/10/99	20:1 HNL
Chromium	ND	mg/L	0.05	SW-846 6010 TCLP	11/8/99 7:09	11/10/99	20:1 HNL
Lead	ND	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99	20:1 HNL
Mercury	ND	mg/L	0.0002	SW-846 7470 TCLP	11/10/99 18:40	11/11/99	18:5 JL
Selenium	ND	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99	20:1 HNL
Silver	ND	mg/L	0.01	SW-846 6010 TCLP	11/8/99 7:09	11/10/99	20:1 HNL

Respectfully submitted,
CT&E Environmental Services, Inc.



Project Manager, Michigan Division

Reported: 11/16/199

Quantifiers	Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01
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ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

000040



Sample ID: 3992779010 **Matrix:** Non Aqueous Liquid
Client Sample ID: T-14 **Location:**
Collected: 10/28/99 12:10:00PM **Project:** S05-9910-810
Received: 11/2/99 1:36:25PM **Sampled By:** JK

Test Description	Result	Unit	Limit	Method	Prepared	Analyzed	Analyst
TOTAL METALS ANALYSIS							
Arsenic	ND	mg/Kg	1	SW-846 6010	11/5/99 14:55	11/9/99 18:57	HNL
Barium	8.6	mg/Kg	0.5	SW-846 6010	11/5/99 14:55	11/9/99 18:57	HNL
Cadmium	0.19	mg/Kg	0.1	SW-846 6010	11/5/99 14:55	11/9/99 18:57	HNL
Chromium	6.7	mg/Kg	2	SW-846 6010	11/5/99 14:55	11/9/99 18:57	HNL
Lead	11	mg/Kg	0.5	SW-846 6010	11/5/99 14:55	11/9/99 18:57	HNL
Mercury	ND	mg/Kg	0.019	SW-846 7471	11/11/99 14:14	11/12/99 14:3	JL
Selenium	ND	mg/Kg	2	SW-846 6010	11/5/99 14:55	11/9/99 18:57	HNL
Silver	0.20	mg/Kg	0.05	SW-846 6010	11/5/99 14:55	11/11/99 11:0	HNL
GENERAL CHEMISTRY ANALYSIS							
Total Hazardous Halogens	ND	mg/Kg	650	SW-846 8021B	11/9/99 5:53	11/10/99 21:4	ORY
PHYSICAL PROPERTY ANALYSIS							
Flashpoint	140	degree F		SW-846 1010		11/3/99 14:49	WD
GC VOLATILE ORGANIC ANALYSIS							
1,1,1-Trichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 21:4	ORY
1,1,2-Trichloro-1,2,2-fluoroet	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 21:4	ORY
1,1-Dichloroethylene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 21:4	ORY
1,2-Dichlorobenzene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 21:4	ORY
1,2-Dichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 21:4	ORY
Carbon tetrachloride	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 21:4	ORY
Chloroform	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 21:4	ORY
cis-1,2-Dichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 21:4	ORY
Dichlorodifluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 21:4	ORY
Methylene chloride	ND	mg/Kg	250	SW-846 8021B	11/9/99 5:53	11/10/99 21:4	ORY
Tetrachloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 21:4	ORY
Trichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 21:4	ORY
Trichlorofluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 21:4	ORY

GC/MS SEMIVOLATILE ORGANIC ANALYSIS

Reported: 11/16/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
 B Blank contaminant
 D Dilution
 J Estimated result
 M Matrix interference

000041



Sample ID: 3992779010 **Matrix:** Non Aqueous Liquid
Client Sample ID: T-14 **Location:**
Collected: 10/28/99 12:10:00PM **Project:** S05-9910-810
Received: 11/2/99 1:36:25PM **Sampled By:** JK

Test Description	Result	Unit	Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
1,2,4-Trichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
1,2-Dichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
1,3-Dichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
1,4-Dichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
2,4,5-Trichlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
2,4,6-Trichlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
2,4-Dichlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
2,4-Dimethylphenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
2,4-Dinitrophenol	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
2,4-Dinitrotoluene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
2,6-Dinitrotoluene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
2-Methylnaphthalene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
2-Methyl-4,6-dinitrophenol	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
2-Methylphenol (o-Cresol)	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
2-Nitroaniline	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
2-Nitrophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
3&4-Methylphenol (p&m-Cresol)	ND D,M	mg/Kg	490	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
3,3-Dichlorobenzidine	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
3-Nitroaniline	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
4-Bromophenyl-phenylether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
4-Chloro-3-methylphenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
4-Chloroaniline	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
4-Chlorophenyl-phenylether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
4-Nitroaniline	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
4-Nitrophenol	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
Acenaphthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
Acenaphthylene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
Anthracene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
Benzo(a)anthracene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
Benzo[a]pyrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
Benzo[b]fluoranthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS

Reported: 11/16/199

Qualifiers

- ND Not detected
- B Blank contaminant
- D Dilution
- J Estimated result
- M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

000042



Sample ID: 3992779010 **Matrix:** Non Aqueous Liquid
Client Sample ID: T-14 **Location:**
Collected: 10/28/99 12:10:00PM **Project:** S05-9910-810
Received: 11/2/99 1:36:25PM **Sampled By:** JK

Test Description	Result	Unit	Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
Benzo[g,h,i]perylene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
Benzo[k]fluoranthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
Bis(2-Chloroethoxy)methane	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
Bis(2-Chloroethyl)ether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
bis(2-chloroisopropyl)ether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
bis(2-Ethylhexyl)phthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
Butylbenzylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
Carbazole	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
Chrysene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
Di-n-butylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
di-n-Octylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
E- π izo[a,h]anthracene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
1,4-benzofuran	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
Diethylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
Dimethylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
Fluoranthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
Fluorene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
Hexachlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
Hexachlorobutadiene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
Hexachlorocyclopentadiene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
Hexachloroethane	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
Indeno[1,2,3-c,d] pyrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
Isophorone	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
N-Nitroso-di-n-propylamine	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
N-Nitrosodiphenylamine	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
Naphthalene	290 D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
Nitrobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
Pentachlorophenol	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
Phenanthrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
Phenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS
Pyrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:0	JLS

GC SEMIVOLATILE ORGANIC ANALYSIS

Reported: 11/16/199

Qualifiers

- ND Not detected
- B Blank contaminant
- D Dilution
- J Estimated result
- M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

000043



CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID:	3992779010	Matrix:	Non Aqueous Liquid
Client Sample ID:	T-14	Location:	
Collected:	10/28/99 12:10:00PM	Project:	S05-9910-810
Received:	11/2/99 1:36:25PM	Sampled By:	JK

Test Description	Result	Unit	Limit	Method	Prepared	Analyzed	Analyst
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GC SEMIVOLATILE ORGANIC ANALYSIS

Aroclor-1016	ND	mg/Kg	0.99	SW846 8082 PCB	11/4/99 8:09	11/10/99	5:16 TMJ
Aroclor-1221	ND	mg/Kg	0.99	SW846 8082 PCB	11/4/99 8:09	11/10/99	5:16 TMJ
Aroclor-1232	ND	mg/Kg	0.99	SW846 8082 PCB	11/4/99 8:09	11/10/99	5:16 TMJ
Aroclor-1242	ND	mg/Kg	0.99	SW846 8082 PCB	11/4/99 8:09	11/10/99	5:16 TMJ
Aroclor-1248	ND	mg/Kg	0.99	SW846 8082 PCB	11/4/99 8:09	11/10/99	5:16 TMJ
Aroclor-1254	ND	mg/Kg	0.99	SW846 8082 PCB	11/4/99 8:09	11/10/99	5:16 TMJ
Aroclor-1260	ND	mg/Kg	0.99	SW846 8082 PCB	11/4/99 8:09	11/10/99	5:16 TMJ

TCLP METAL ANALYSIS SW-846 Method 1311

Arsenic	ND	mg/L	2	SW-846 6010 TCLP	11/9/99 9:02	11/9/99	16:28 HNL
Barium	1.7	mg/L	0.5	SW-846 6010 TCLP	11/9/99 9:02	11/9/99	16:28 HNL
Mium	ND	mg/L	0.5	SW-846 6010 TCLP	11/9/99 9:02	11/9/99	16:28 HNL
Chromium	ND	mg/L	5	SW-846 6010 TCLP	11/9/99 9:02	11/9/99	16:28 HNL
Lead	2.3	mg/L	2	SW-846 6010 TCLP	11/9/99 9:02	11/9/99	16:28 HNL
Mercury	ND D,M	mg/L	0.02	SW-846 7470 TCLP	11/10/99 18:40	11/11/99	18:5 JL
Selenium	0.21	mg/L	0.2	SW-846 7740 TCLP	11/9/99 9:04	11/15/99	10:0 SPE
Silver	ND	mg/L	1	SW-846 6010 TCLP	11/9/99 9:02	11/9/99	16:28 HNL

Respectfully submitted,
CT&E Environmental Services, Inc.

Lidija C. Orlitz
Project Manager, Michigan Division

Reported: 11/16/1999

Classifiers

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

000044



CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID:	3992779011	Matrix:	Non Aqueous Liquid
Client Sample ID:	D-1A	Location:	
Collected:	10/28/99 12:30:00PM	Project:	S05-9910-810
Received:	11/2/99 1:36:25PM	Sampled By:	JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
TOTAL METALS ANALYSIS							
Arsenic	ND	mg/Kg	1	SW-846 6010	11/5/99 14:55	11/9/99 19:03	HNL
Barium	14	mg/Kg	0.5	SW-846 6010	11/5/99 14:55	11/9/99 19:03	HNL
Cadmium	0.21	mg/Kg	0.1	SW-846 6010	11/5/99 14:55	11/9/99 19:03	HNL
Chromium	5.3	mg/Kg	2	SW-846 6010	11/5/99 14:55	11/9/99 19:03	HNL
Lead	7.9	mg/Kg	0.5	SW-846 6010	11/5/99 14:55	11/9/99 19:03	HNL
Mercury	ND	mg/Kg	0.020	SW-846 7471	11/11/99 14:14	11/12/99 14:3	JL
Selenium	ND	mg/Kg	2	SW-846 6010	11/5/99 14:55	11/9/99 19:03	HNL
Silver	0.063	mg/Kg	0.05	SW-846 6010	11/5/99 14:55	11/11/99 11:0	HNL
GENERAL CHEMISTRY ANALYSIS							
Total Hazardous Halogens	ND	mg/Kg	650	SW-846 8021B	11/9/99 5:53	11/10/99 0:55	ORY
PHYSICAL PROPERTY ANALYSIS							
Flashpoint	>200	degree F		SW-846 1010		11/3/99 14:49	WD
GC VOLATILE ORGANIC ANALYSIS							
1,1,1-Trichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 0:55	ORY
1,1,2-Trichloro-1,2,2-fluoroet	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 0:55	ORY
1,1-Dichloroethylene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 0:55	ORY
1,2-Dichlorobenzene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 0:55	ORY
1,2-Dichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 0:55	ORY
Carbon tetrachloride	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 0:55	ORY
Chloroform	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 0:55	ORY
cis-1,2-Dichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 0:55	ORY
Dichlorodifluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 0:55	ORY
Methylene chloride	ND	mg/Kg	250	SW-846 8021B	11/9/99 5:53	11/10/99 0:55	ORY
Tetrachloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 0:55	ORY
Trichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 0:55	ORY
Trichlorofluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 0:55	ORY

GC/MS SEMIVOLATILE ORGANIC ANALYSIS

Reported: 11/16/199

Classifiers

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

000045

Sample ID:	3992779011	Matrix:	Non Aqueous Liquid
Client Sample ID:	D-1A	Location:	
Collected:	10/28/99 12:30:00PM	Project:	S05-9910-810
Received:	11/2/99 1:36:25PM	Sampled By:	JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
1,2,4-Trichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5	JLS
1,2-Dichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5	JLS
1,3-Dichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5	JLS
1,4-Dichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5	JLS
2,4,5-Trichlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5	JLS
2,4,6-Trichlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5	JLS
2,4-Dichlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5	JLS
2,4-Dimethylphenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5	JLS
2,4-Dinitrophenol	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/12/99 14:5	JLS
2,4-Dinitrotoluene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5	JLS
2,6-Dinitrotoluene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5	JLS
1,1,2,4-Tetrachloronaphthalene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5	JLS
2-Chlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5	JLS
2-Methyl naphthalene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5	JLS
2-Methyl-4,6-dinitrophenol	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/12/99 14:5	JLS
2-Methylphenol (o-Cresol)	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5	JLS
2-Nitroaniline	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/12/99 14:5	JLS
2-Nitrophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5	JLS
3&4-Methylphenol (p&m-Cresol)	ND D,M	mg/Kg	490	SW-846 8270	11/10/99 16:53	11/12/99 14:5	JLS
3,3-Dichlorobenzidine	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/12/99 14:5	JLS
3-Nitroaniline	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/12/99 14:5	JLS
4-Bromophenyl-phenylether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5	JLS
4-Chloro-3-methylphenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5	JLS
4-Chloroaniline	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/12/99 14:5	JLS
4-Chlorophenyl-phenylether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5	JLS
4-Nitroaniline	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/12/99 14:5	JLS
4-Nitrophenol	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/12/99 14:5	JLS
Acenaphthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5	JLS
Acenaphthylene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5	JLS
Anthracene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5	JLS
Benzo(a)anthracene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5	JLS
Benzo[a]pyrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5	JLS
Benzo[b]fluoranthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5	JLS

Reported: 11/16/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
 B Blank contaminant
 D Dilution
 J Estimated result
 M Matrix interference

000046



Sample ID:	3992779011	Matrix:	Non Aqueous Liquid			
Client Sample ID:	D-1A	Location:				
Collected:	10/28/99 12:30:00PM	Project:	S05-9910-810			
Received:	11/2/99 1:36:25PM	Sampled By:	JK			
Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS						
Benzo[g,h,i]perylene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5 JLS
Benzo[k]fluoranthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5 JLS
Bis(2-Chloroethoxy)methane	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5 JLS
Bis(2-Chloroethyl)ether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5 JLS
bis(2-chloroisopropyl)ether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5 JLS
bis(2-Ethylhexyl)phthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5 JLS
Butylbenzylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5 JLS
Carbazole	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5 JLS
Chrysene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5 JLS
Di-n-butylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5 JLS
di-n-Octylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5 JLS
benzo[a,h]anthracene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5 JLS
L-benzofuran	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5 JLS
Diethylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5 JLS
Dimethylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5 JLS
Fluoranthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5 JLS
Fluorene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5 JLS
Hexachlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5 JLS
Hexachlorobutadiene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5 JLS
Hexachlorocyclopentadiene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5 JLS
Hexachloroethane	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5 JLS
Indeno[1,2,3-c,d] pyrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5 JLS
Isophorone	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5 JLS
N-Nitroso-di-n-propylamine	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5 JLS
N-Nitrosodiphenylamine	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5 JLS
Naphthalene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5 JLS
Nitrobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5 JLS
Pentachlorophenol	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/12/99 14:5 JLS
Phenanthrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5 JLS
Phenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5 JLS
Pyrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 14:5 JLS

GC SEMIVOLATILE ORGANIC ANALYSIS

Reported: 11/16/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

- ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

000047



CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID:	3992779011	Matrix:	Non Aqueous Liquid
Client Sample ID:	D-1A	Location:	
Collected:	10/28/99 12:30:00PM	Project:	S05-9910-810
Received:	11/2/99 1:36:25PM	Sampled By:	JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
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GC SEMIVOLATILE ORGANIC ANALYSIS

Aroclor-1016	ND	mg/Kg	0.99	SW846 8082 PCB	11/8/99 17:12	11/10/99 17:5	TMJ
Aroclor-1221	ND	mg/Kg	0.99	SW846 8082 PCB	11/8/99 17:12	11/10/99 17:5	TMJ
Aroclor-1232	ND	mg/Kg	0.99	SW846 8082 PCB	11/8/99 17:12	11/10/99 17:5	TMJ
Aroclor-1242	ND	mg/Kg	0.99	SW846 8082 PCB	11/8/99 17:12	11/10/99 17:5	TMJ
Aroclor-1248	ND	mg/Kg	0.99	SW846 8082 PCB	11/8/99 17:12	11/10/99 17:5	TMJ
Aroclor-1254	ND	mg/Kg	0.99	SW846 8082 PCB	11/8/99 17:12	11/10/99 17:5	TMJ
Aroclor-1260	ND	mg/Kg	0.99	SW846 8082 PCB	11/8/99 17:12	11/10/99 17:5	TMJ

TCLP METAL ANALYSIS SW-846 Method 1311

Arsenic	ND	mg/L	2	SW-846 6010 TCLP	11/9/99 9:02	11/9/99 16:35	HNL
Barium	5.6	mg/L	0.5	SW-846 6010 TCLP	11/9/99 9:02	11/9/99 16:35	HNL
Manganese	ND	mg/L	0.5	SW-846 6010 TCLP	11/9/99 9:02	11/9/99 16:35	HNL
Chromium	ND	mg/L	5	SW-846 6010 TCLP	11/9/99 9:02	11/9/99 16:35	HNL
Lead	3.6	mg/L	2	SW-846 6010 TCLP	11/9/99 9:02	11/9/99 16:35	HNL
Mercury	ND D,M	mg/L	0.02	SW-846 7470 TCLP	11/10/99 18:40	11/11/99 18:5	JL
Selenium	ND	mg/L	0.2	SW-846 7740 TCLP	11/9/99 9:04	11/15/99 10:0	SPE
Silver	ND	mg/L	1	SW-846 6010 TCLP	11/9/99 9:02	11/9/99 16:35	HNL

Respectfully submitted,
CT&E Environmental Services, Inc.

Udaya Chaitin
Project Manager, Michigan Division

Reported: 11/16/1999

Qualifiers

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

000048



Sample ID:	3992779012	Matrix:	Non Aqueous Liquid			
Client Sample ID:	D-2	Location:				
Collected:	10/28/99 12:45:00PM	Project:	S05-9910-810			
Received:	11/2/99 1:36:25PM	Sampled By:	JK			
Test Description	Result	Unit	Limit	Method	Prepared	Analyzed Analyst
TOTAL METALS ANALYSIS						
Arsenic	5.1 μ M	mg/Kg	0.9	SW-846 6010	11/5/99 14:55	11/11/99 10:1 HNL
Barium	110	mg/Kg	0.4	SW-846 6010	11/5/99 14:55	11/9/99 17:10 HNL
Cadmium	0.77	mg/Kg	0.09	SW-846 6010	11/5/99 14:55	11/9/99 17:10 HNL
Chromium	33	mg/Kg	2	SW-846 6010	11/5/99 14:55	11/9/99 17:10 HNL
Lead	130	mg/Kg	0.4	SW-846 6010	11/5/99 14:55	11/9/99 17:10 HNL
Mercury	0.22	mg/Kg	0.015	SW-846 7471	11/11/99 14:14	11/12/99 14:3 JL
Selenium	3.5	mg/Kg	2	SW-846 6010	11/5/99 14:55	11/11/99 10:1 HNL
Silver	0.92	mg/Kg	0.04	SW-846 6010	11/5/99 14:55	11/11/99 10:1 HNL
GENERAL CHEMISTRY ANALYSIS						
Total Hazardous Halogens	ND	mg/Kg	650	SW-846 8021B	11/9/99 5:53	11/10/99 16:2 ORY
PHYSICAL PROPERTY ANALYSIS						
Flashpoint	>200	degree F		SW-846 1010		11/3/99 14:49 WD
GC VOLATILE ORGANIC ANALYSIS						
1,1,1-Trichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 16:2 ORY
1,1,2-Trichloro-1,2,2-fluoroet	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 16:2 ORY
1,1-Dichloroethylene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 16:2 ORY
1,2-Dichlorobenzene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 16:2 ORY
1,2-Dichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 16:2 ORY
Carbon tetrachloride	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 16:2 ORY
Chloroform	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 16:2 ORY
cis-1,2-Dichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 16:2 ORY
Dichlorodifluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 16:2 ORY
Methylene chloride	ND	mg/Kg	250	SW-846 8021B	11/9/99 5:53	11/10/99 16:2 ORY
Tetrachloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 16:2 ORY
Trichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 16:2 ORY
Trichlorofluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 16:2 ORY
GC/MS SEMIVOLATILE ORGANIC ANALYSIS						

Reported: 11/16/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

000049



Sample ID: 3992779012 **Matrix:** Non Aqueous Liquid
Client Sample ID: D-2 **Location:**
Collected: 10/28/99 12:45:00PM **Project:** S05-9910-810
Received: 11/2/99 1:36:25PM **Sampled By:** JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
1,2,4-Trichlorobenzene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
1,2-Dichlorobenzene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
1,3-Dichlorobenzene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
1,4-Dichlorobenzene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
2,4,5-Trichlorophenol	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
2,4,6-Trichlorophenol	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
2,4-Dichlorophenol	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
2,4-Dimethylphenol	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
2,4-Dinitrophenol	ND D,M	mg/Kg	960	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
2,4-Dinitrotoluene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
2,6-Dinitrotoluene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
Chloronaphthalene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
2-Chlorophenol	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
2-Methyl naphthalene	1200 D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
2-Methyl-4,6-dinitrophenol	ND D,M	mg/Kg	960	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
2-Methylphenol (o-Cresol)	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
2-Nitroaniline	ND D,M	mg/Kg	960	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
2-Nitrophenol	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
3&4-Methylphenol (p&m-Cresol)	ND D,M	mg/Kg	480	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
3,3-Dichlorobenzidine	ND D,M	mg/Kg	960	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
3-Nitroaniline	ND D,M	mg/Kg	960	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
4-Bromophenyl-phenylether	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
4-Chloro-3-methylphenol	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
4-Chloroaniline	ND D,M	mg/Kg	960	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
4-Chlorophenyl-phenylether	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
4-Nitroaniline	ND D,M	mg/Kg	960	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
4-Nitrophenol	ND D,M	mg/Kg	960	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
Acenaphthene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
Acenaphthylene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
Anthracene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
Benzo(a)anthracene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
Benzo[a]pyrene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
Benzo[b]fluoranthene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS

Reported: 11/16/199

Qualifiers

ND Not detected
 B Blank contaminant
 D Dilution
 J Estimated result
 M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

000050

CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID:	3992779012	Matrix:	Non Aqueous Liquid
Client Sample ID:	D-2	Location:	
Collected:	10/28/99 12:45:00PM	Project:	S05-9910-810
Received:	11/2/99 1:36:25PM	Sampled By:	JK

Test Description	Result	Unit	Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
Benzof[g,h,i]perylene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
Benzo[k]fluoranthene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
Bis(2-Chloroethoxy)methane	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
Bis(2-Chloroethyl)ether	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
bis(2-chloroisopropyl)ether	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
bis(2-Ethylhexyl)phthalate	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
Butylbenzylphthalate	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
Carbazole	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
Chrysene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
Di-n-butylphthalate	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
di-n-Octylphthalate	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
benzo[a,h]anthracene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
Luenzofuran	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
Diethylphthalate	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
Dimethylphthalate	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
Fluoranthene	330 D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
Fluorene	240 D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
Hexachlorobenzene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
Hexachlorobutadiene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
Hexachlorocyclopentadiene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
Hexachloroethane	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
Indeno[1,2,3-c,d] pyrene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
Isophorone	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
N-Nitroso-di-n-propylamine	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
N-Nitrosodiphenylamine	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
Naphthalene	930 D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
Nitrobenzene	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
Pentachlorophenol	ND D,M	mg/Kg	960	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
Phenanthrene	800 D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
Phenol	ND D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS
Pyrene	280 D,M	mg/Kg	240	SW-846 8270	11/10/99 16:53	11/12/99 15:5	JLS

GC SEMIVOLATILE ORGANIC ANALYSIS

Reported: 11/16/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
 B Blank contaminant
 D Dilution
 J Estimated result
 M Matrix interference

000051



CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID:	3992779012	Matrix:	Non Aqueous Liquid
Client Sample ID:	D-2	Location:	
Collected:	10/28/99 12:45:00PM	Project:	S05-9910-810
Received:	11/2/99 1:36:25PM	Sampled By:	JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
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GC SEMIVOLATILE ORGANIC ANALYSIS

Aroclor-1016	ND	mg/Kg	0.89	SW846 8082 PCB	11/8/99 17:12	11/10/99 18:2	TMJ
Aroclor-1221	ND	mg/Kg	0.89	SW846 8082 PCB	11/8/99 17:12	11/10/99 18:2	TMJ
Aroclor-1232	ND	mg/Kg	0.89	SW846 8082 PCB	11/8/99 17:12	11/10/99 18:2	TMJ
Aroclor-1242	ND	mg/Kg	0.89	SW846 8082 PCB	11/8/99 17:12	11/10/99 18:2	TMJ
Aroclor-1248	ND	mg/Kg	0.89	SW846 8082 PCB	11/8/99 17:12	11/10/99 18:2	TMJ
Aroclor-1254	ND	mg/Kg	0.89	SW846 8082 PCB	11/8/99 17:12	11/10/99 18:2	TMJ
Aroclor-1260	ND	mg/Kg	0.89	SW846 8082 PCB	11/8/99 17:12	11/10/99 18:2	TMJ

TCLP METAL ANALYSIS SW-846 Method 1311

Arsenic	ND	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/11/99 15:4	HNL
Barium	0.14	mg/L	0.005	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:1	HNL
Mium	ND	mg/L	0.005	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:1	HNL
Chromium	0.064	mg/L	0.05	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:1	HNL
Lead	ND	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:1	HNL
Mercury	ND	mg/L	0.0002	SW-846 7470 TCLP	11/10/99 18:40	11/11/99 18:5	JL
Selenium	0.045	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:1	HNL
Silver	ND	mg/L	0.01	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:1	HNL

Respectfully submitted,
CT&E Environmental Services, Inc.

Ledya G. Zilke

Project Manager, Michigan Division

Reported: 11/16/199

Qualifiers

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

000052

CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID:	3992779013	Matrix:	Non Aqueous Liquid
Client Sample ID:	D-3	Location:	
Collected:	10/28/99 1:00:00PM	Project:	S05-9910-810
Received:	11/2/99 1:36:25PM	Sampled By:	JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
TOTAL METALS ANALYSIS							
Arsenic	ND	mg/Kg	1	SW-846 6010	11/5/99 14:55	11/9/99 19:08	HNL
Barium	ND	mg/Kg	0.5	SW-846 6010	11/5/99 14:55	11/9/99 19:08	HNL
Cadmium	ND	mg/Kg	0.1	SW-846 6010	11/5/99 14:55	11/9/99 19:08	HNL
Chromium	ND	mg/Kg	3	SW-846 6010	11/5/99 14:55	11/9/99 19:08	HNL
Lead	0.63	mg/Kg	0.5	SW-846 6010	11/5/99 14:55	11/9/99 19:08	HNL
Mercury	ND	mg/Kg	0.019	SW-846 7471	11/11/99 14:14	11/12/99 14:3	JL
Selenium	2.8 J,M	mg/Kg	2	SW-846 6010	11/5/99 14:55	11/11/99 11:3	HNL
Silver	0.14 J,M	mg/Kg	0.05	SW-846 6010	11/5/99 14:55	11/11/99 11:3	HNL
GENERAL CHEMISTRY ANALYSIS							
Total Hazardous Halogens	ND	mg/Kg	650	SW-846 8021B	11/9/99 5:53	11/10/99 17:0	ORY
PHYSICAL PROPERTY ANALYSIS							
Flashpoint	>200	degree F		SW-846 1010		11/3/99 14:49	WD
GC VOLATILE ORGANIC ANALYSIS							
1,1,1-Trichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 17:0	ORY
1,1,2-Trichloro-1,2,2-fluoroet	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 17:0	ORY
1,1-Dichloroethylene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 17:0	ORY
1,2-Dichlorobenzene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 17:0	ORY
1,2-Dichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 17:0	ORY
Carbon tetrachloride	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 17:0	ORY
Chloroform	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 17:0	ORY
cis-1,2-Dichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 17:0	ORY
Dichlorodifluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 17:0	ORY
Methylene chloride	ND	mg/Kg	250	SW-846 8021B	11/9/99 5:53	11/10/99 17:0	ORY
Tetrachloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 17:0	ORY
Trichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 17:0	ORY
Trichlorofluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 17:0	ORY

GC/MS SEMIVOLATILE ORGANIC ANALYSIS

Reported: 11/16/199

Classifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

000053



Sample ID:	3992779013	Matrix:	Non Aqueous Liquid
Client Sample ID:	D-3	Location:	
Collected:	10/28/99 1:00:00PM	Project:	S05-9910-810
Received:	11/2/99 1:36:25PM	Sampled By:	JK

Test Description	Result	Unit	Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
1,2,4-Trichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
1,2-Dichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
1,3-Dichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
1,4-Dichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
2,4,5-Trichlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
2,4,6-Trichlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
2,4-Dichlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
2,4-Dimethylphenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
2,4-Dinitrophenol	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
2,4-Dinitrotoluene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
2,6-Dinitrotoluene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
1-Horonaphthalene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
2-Chlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
2-Methyl naphthalene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
2-Methyl-4,6-dinitrophenol	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
2-Methylphenol (o-Cresol)	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
2-Nitroaniline	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
2-Nitrophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
3&4-Methylphenol (p&m-Cresol)	ND D,M	mg/Kg	500	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
3,3-Dichlorobenzidine	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
3-Nitroaniline	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
4-Bromophenyl-phenylether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
4-Chloro-3-methylphenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
4-Chloroaniline	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
4-Chlorophenyl-phenylether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
4-Nitroaniline	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
4-Nitrophenol	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
Acenaphthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
Acenaphthylene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
Anthracene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
Benzo(a)anthracene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
Benzo[a]pyrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
Benzo[b]fluoranthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS

Reported: 11/16/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

- ND Not detected
- B Blank contaminant
- D Dilution
- J Estimated result
- M Matrix interference

000054



Sample ID: 3992779013 Matrix: Non Aqueous Liquid
Client Sample ID: D-3 Location:
Collected: 10/28/99 1:00:00PM Project: S05-9910-810
Received: 11/2/99 1:36:25PM Sampled By: JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
Benzo[g,h,i]perylene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
Benzo[k]fluoranthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
Bis(2-Chloroethoxy)methane	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
Bis(2-Chloroethyl)ether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
bis(2-chloroisopropyl)ether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
bis(2-Ethylhexyl)phthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
Butylbenzylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
Carbazole	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
Chrysene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
Di-n-butylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
di-n-Octylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
benzo[a,h]anthracene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
cyclohexanofuran	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
Diethylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
Dimethylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
Fluoranthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
Fluorene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
Hexachlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
Hexachlorobutadiene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
Hexachlorocyclopentadiene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
Hexachloroethane	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
Indeno[1,2,3-c,d] pyrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
Isophorone	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
N-Nitroso-di-n-propylamine	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
N-Nitrosodiphenylamine	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
Naphthalene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
Nitrobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
Pentachlorophenol	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
Phenanthrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
Phenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS
Pyrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 16:4	JLS

GC SEMIVOLATILE ORGANIC ANALYSIS

Reported: 11/16/1999

Classifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

000055



CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID:	3992779013	Matrix:	Non Aqueous Liquid
Client Sample ID:	D-3	Location:	
Collected:	10/28/99 1:00:00PM	Project:	S05-9910-810
Received:	11/2/99 1:36:25PM	Sampled By:	JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
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GC SEMIVOLATILE ORGANIC ANALYSIS

Aroclor-1016	ND	mg/Kg	0.97	SW846 8082 PCB	11/8/99 17:12	11/10/99 18:5	TMJ
Aroclor-1221	ND	mg/Kg	0.97	SW846 8082 PCB	11/8/99 17:12	11/10/99 18:5	TMJ
Aroclor-1232	ND	mg/Kg	0.97	SW846 8082 PCB	11/8/99 17:12	11/10/99 18:5	TMJ
Aroclor-1242	ND	mg/Kg	0.97	SW846 8082 PCB	11/8/99 17:12	11/10/99 18:5	TMJ
Aroclor-1248	77	mg/Kg	0.97	SW846 8082 PCB	11/8/99 17:12	11/10/99 18:5	TMJ
Aroclor-1254	ND	mg/Kg	0.97	SW846 8082 PCB	11/8/99 17:12	11/10/99 18:5	TMJ
Aroclor-1260	1.9	mg/Kg	0.97	SW846 8082 PCB	11/8/99 17:12	11/10/99 18:5	TMJ

TCLP METAL ANALYSIS SW-846 Method 1311

Arsenic	ND	mg/L	2	SW-846 6010 TCLP	11/9/99 9:02	11/9/99 16:41	HNL
Barium	0.61	mg/L	0.5	SW-846 6010 TCLP	11/9/99 9:02	11/9/99 16:41	HNL
Chromium	ND	mg/L	0.5	SW-846 6010 TCLP	11/9/99 9:02	11/9/99 16:41	HNL
Lead	ND	mg/L	2	SW-846 6010 TCLP	11/9/99 9:02	11/9/99 16:41	HNL
Mercury	ND D,M	mg/L	0.02	SW-846 7470 TCLP	11/10/99 18:40	11/11/99 18:5	JL
Selenium	ND	mg/L	0.2	SW-846 7740 TCLP	11/9/99 9:04	11/15/99 10:0	SPE
Silver	ND	mg/L	1	SW-846 6010 TCLP	11/9/99 9:02	11/9/99 16:41	HNL

Respectfully submitted,
CT&E Environmental Services, Inc.

Lakya Quirk
Project Manager, Michigan Division

Reported: 11/16/1999

Classifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

000056



CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID:	3992779014	Matrix:	Non Aqueous Liquid			
Client Sample ID:	D-4	Location:				
Collected:	10/28/99 1:15:00PM	Project:	S05-9910-810			
Received:	11/2/99 1:36:25PM	Sampled By:	JK			
Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed Analyst
TOTAL METALS ANALYSIS						
Arsenic	ND	mg/Kg	0.9	SW-846 6010	11/5/99 14:55	11/9/99 19:14 HNL
Barium	ND	mg/Kg	0.5	SW-846 6010	11/5/99 14:55	11/9/99 19:14 HNL
Cadmium	ND	mg/Kg	0.09	SW-846 6010	11/5/99 14:55	11/9/99 19:14 HNL
Chromium	ND	mg/Kg	2	SW-846 6010	11/5/99 14:55	11/9/99 19:14 HNL
Lead	ND	mg/Kg	0.5	SW-846 6010	11/5/99 14:55	11/9/99 19:14 HNL
Mercury	ND	mg/Kg	0.019	SW-846 7471	11/11/99 14:14	11/12/99 14:3 JL
Selenium	ND	mg/Kg	2	SW-846 6010	11/5/99 14:55	11/9/99 19:14 HNL
Silver	0.13 ^{J,M}	mg/Kg	0.05	SW-846 6010	11/5/99 14:55	11/11/99 11:3 HNL
GENERAL CHEMISTRY ANALYSIS						
Total Hazardous Halogens	ND	mg/Kg	650	SW-846 8021B	11/9/99 5:53	11/10/99 17:5 ORY
PHYSICAL PROPERTY ANALYSIS						
Flashpoint	>200	degree F		SW-846 1010		11/3/99 14:50 WD
GC VOLATILE ORGANIC ANALYSIS						
1,1,1-Trichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 17:5 ORY
1,1,2-Trichloro-1,2,2-fluoroet	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 17:5 ORY
1,1-Dichloroethylene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 17:5 ORY
1,2-Dichlorobenzene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 17:5 ORY
1,2-Dichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 17:5 ORY
Carbon tetrachloride	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 17:5 ORY
Chloroform	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 17:5 ORY
cis-1,2-Dichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 17:5 ORY
Dichlorodifluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 17:5 ORY
Methylene chloride	ND	mg/Kg	250	SW-846 8021B	11/9/99 5:53	11/10/99 17:5 ORY
Tetrachloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 17:5 ORY
Trichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 17:5 ORY
Trichlorofluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 17:5 ORY
GC/MS SEMIVOLATILE ORGANIC ANALYSIS						

Reported: 11/16/199

Classifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

000057



Sample ID: 3992779014 **Matrix:** Non Aqueous Liquid
Client Sample ID: D-4 **Location:**
Collected: 10/28/99 1:15:00PM **Project:** S05-9910-810
Received: 11/2/99 1:36:25PM **Sampled By:** JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
1,2,4-Trichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
1,2-Dichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
1,3-Dichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
1,4-Dichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
2,4,5-Trichlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
2,4,6-Trichlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
2,4-Dichlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
2,4-Dimethylphenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
2,4-Dinitrophenol	ND D,M	mg/Kg	1000	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
2,4-Dinitrotoluene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
2,6-Dinitrotoluene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
1,1'-Boronaphthalene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
2-Chlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
2-Methyl naphthalene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
2-Methyl-4,6-dinitrophenol	ND D,M	mg/Kg	1000	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
2-Methylphenol (o-Cresol)	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
2-Nitroaniline	ND D,M	mg/Kg	1000	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
2-Nitrophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
3&4-Methylphenol (p&m-Cresol)	ND D,M	mg/Kg	500	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
3,3-Dichlorobenzidine	ND D,M	mg/Kg	1000	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
3-Nitroaniline	ND D,M	mg/Kg	1000	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
4-Bromophenyl-phenylether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
4-Chloro-3-methylphenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
4-Chloroaniline	ND D,M	mg/Kg	1000	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
4-Chlorophenyl-phenylether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
4-Nitroaniline	ND D,M	mg/Kg	1000	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
4-Nitrophenol	ND D,M	mg/Kg	1000	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
Acenaphthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
Acenaphthylene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
Anthracene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
Benzo(a)anthracene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
Benzo[a]pyrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
Benzo[b]fluoranthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS

Reported: 11/16/199

Qualifiers

- ND Not detected
- B Blank contaminant
- D Dilution
- J Estimated result
- M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

000058

CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID:	3992779014	Matrix:	Non Aqueous Liquid				
Client Sample ID:	D-4	Location:					
Collected:	10/28/99 1:15:00PM	Project:	S05-9910-810				
Received:	11/2/99 1:36:25PM	Sampled By:	JK				
Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
Benzo[g,h,i]perylene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
Benzo[k]fluoranthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
Bis(2-Chloroethoxy)methane	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
Bis(2-Chloroethyl)ether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
bis(2-chloroisopropyl)ether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
bis(2-Ethylhexyl)phthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
Butylbenzylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
Carbazole	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
Chrysene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
Di-n-butylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
di-n-Octylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
benzo[a,h]anthracene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
Dioxofuran	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
Diethylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
Dimethylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
Fluoranthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
Fluorene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
Hexachlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
Hexachlorobutadiene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
Hexachlorocyclopentadiene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
Hexachloroethane	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
Indeno[1,2,3-c,d] pyrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
Isophorone	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
N-Nitroso-di-n-propylamine	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
N-Nitrosodiphenylamine	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
Naphthalene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
Nitrobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
Pentachlorophenol	ND D,M	mg/Kg	1000	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
Phenanthrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
Phenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS
Pyrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 17:3	JLS

GC SEMIVOLATILE ORGANIC ANALYSIS

Reported: 11/16/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
 B Blank contaminant
 D Dilution
 J Estimated result
 M Matrix interference

000059



Sample ID: 3992779014 Matrix: Non Aqueous Liquid
Client Sample ID: D-4 Location:
Collected: 10/28/99 1:15:00PM Project: S05-9910-810
Received: 11/2/99 1:36:25PM Sampled By: JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC SEMIVOLATILE ORGANIC ANALYSIS							
Aroclor-1016	ND	mg/Kg	9.7	SW846 8082 PCB	11/4/99 8:10	11/10/99	5:44 TMJ
Aroclor-1221	ND	mg/Kg	9.7	SW846 8082 PCB	11/4/99 8:10	11/10/99	5:44 TMJ
Aroclor-1232	ND	mg/Kg	9.7	SW846 8082 PCB	11/4/99 8:10	11/10/99	5:44 TMJ
Aroclor-1242	ND	mg/Kg	9.7	SW846 8082 PCB	11/4/99 8:10	11/10/99	5:44 TMJ
Aroclor-1248	190	mg/Kg	9.7	SW846 8082 PCB	11/4/99 8:10	11/10/99	5:44 TMJ
Aroclor-1254	ND	mg/Kg	9.7	SW846 8082 PCB	11/4/99 8:10	11/10/99	5:44 TMJ
Aroclor-1260	ND	mg/Kg	9.7	SW846 8082 PCB	11/4/99 8:10	11/10/99	5:44 TMJ
Aroclor-1262	D	mg/Kg	9.7	SW846 8082 PCB	11/4/99 8:10	11/10/99	5:44 TMJ
Aroclor-1268	D	mg/Kg	9.7	SW846 8082 PCB	11/4/99 8:10	11/10/99	5:44 TMJ
TCLP METAL ANALYSIS SW-846 Method 1311							
Nickel	ND	mg/L	2	SW-846 6010 TCLP	11/9/99 9:02	11/9/99	16:46 HNL
Barium	2.3	mg/L	0.5	SW-846 6010 TCLP	11/9/99 9:02	11/9/99	16:46 HNL
Cadmium	ND	mg/L	0.5	SW-846 6010 TCLP	11/9/99 9:02	11/9/99	16:46 HNL
Chromium	ND	mg/L	5	SW-846 6010 TCLP	11/9/99 9:02	11/9/99	16:46 HNL
Lead	ND	mg/L	2	SW-846 6010 TCLP	11/9/99 9:02	11/9/99	16:46 HNL
Mercury	ND	mg/L	0.02	SW-846 7470 TCLP	11/10/99 18:40	11/11/99	18:5 JL
Selenium	ND	mg/L	0.2	SW-846 7740 TCLP	11/9/99 9:04	11/15/99	10:0 SPE
Silver	ND	mg/L	1	SW-846 6010 TCLP	11/9/99 9:02	11/9/99	16:46 HNL

Respectfully submitted,
CT&E Environmental Services, Inc.

Project Manager, Michigan Division

Reported: 11/16/1999

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

000060



Sample ID:	3992779015	Matrix:	Non Aqueous Liquid
Client Sample ID:	T-51	Location:	
Collected:	10/28/99 1:30:00PM	Project:	S05-9910-810
Received:	11/2/99 1:36:25PM	Sampled By:	JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
TOTAL METALS ANALYSIS							
Arsenic	ND	mg/Kg	0.9	SW-846 6010	11/5/99 14:55	11/9/99 19:19	HNL
Barium	87	mg/Kg	0.5	SW-846 6010	11/5/99 14:55	11/9/99 19:19	HNL
Cadmium	0.53	mg/Kg	0.09	SW-846 6010	11/5/99 14:55	11/9/99 19:19	HNL
Chromium	15	mg/Kg	2	SW-846 6010	11/5/99 14:55	11/9/99 19:19	HNL
Lead	92	mg/Kg	0.5	SW-846 6010	11/5/99 14:55	11/9/99 19:19	HNL
Mercury	ND	mg/Kg	0.020	SW-846 7471	11/11/99 14:14	11/12/99 14:3	JL
Selenium	ND	mg/Kg	2	SW-846 6010	11/5/99 14:55	11/11/99 11:4	HNL
Silver	0.34 J,M	mg/Kg	0.05	SW-846 6010	11/5/99 14:55	11/11/99 11:4	HNL
GENERAL CHEMISTRY ANALYSIS							
Total Hazardous Halogens	ND	mg/Kg	650	SW-846 8021B	11/9/99 5:53	11/10/99 18:4	ORY
PHYSICAL PROPERTY ANALYSIS							
Flashpoint	>200	degree F		SW-846 1010		11/3/99 14:50	WD
GC VOLATILE ORGANIC ANALYSIS							
1,1,1-Trichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 18:4	ORY
1,1,2-Trichloro-1,2,2-fluoroet	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 18:4	ORY
1,1-Dichloroethylene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 18:4	ORY
1,2-Dichlorobenzene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 18:4	ORY
1,2-Dichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 18:4	ORY
Carbon tetrachloride	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 18:4	ORY
Chloroform	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 18:4	ORY
cis-1,2-Dichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 18:4	ORY
Dichlorodifluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 18:4	ORY
Methylene chloride	ND	mg/Kg	250	SW-846 8021B	11/9/99 5:53	11/10/99 18:4	ORY
Tetrachloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 18:4	ORY
Trichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 18:4	ORY
Trichlorofluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 18:4	ORY

GC/MS SEMIVOLATILE ORGANIC ANALYSIS

Reported: 11/16/199

Classifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

- ND Not detected
- B Blank contaminant
- D Dilution
- J Estimated result
- M Matrix interference

000061

Sample ID:	3992779015	Matrix:	Non Aqueous Liquid				
Client Sample ID:	T-51	Location:					
Collected:	10/28/99 1:30:00PM	Project:	S05-9910-810				
Received:	11/2/99 1:36:25PM	Sampled By:	JK				
Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
1,2,4-Trichlorobenzene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
1,2-Dichlorobenzene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
1,3-Dichlorobenzene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
1,4-Dichlorobenzene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
2,4,5-Trichlorophenol	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
2,4,6-Trichlorophenol	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
2,4-Dichlorophenol	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
2,4-Dimethylphenol	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
2,4-Dinitrophenol	ND D,M	mg/Kg	890	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
2,4-Dinitrotoluene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
2,6-Dinitrotoluene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
1-Nitronaphthalene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
2-Chlorophenol	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
2-Methyl naphthalene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
2-Methyl-4,6-dinitrophenol	ND D,M	mg/Kg	890	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
2-Methylphenol (o-Cresol)	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
2-Nitroaniline	ND D,M	mg/Kg	890	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
2-Nitrophenol	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
3&4-Methylphenol (p&m-Cresol)	ND D,M	mg/Kg	440	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
3,3-Dichlorobenzidine	ND D,M	mg/Kg	890	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
3-Nitroaniline	ND D,M	mg/Kg	890	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
4-Bromophenyl-phenylether	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
4-Chloro-3-methylphenol	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
4-Chloroaniline	ND D,M	mg/Kg	890	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
4-Chlorophenyl-phenylether	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
4-Nitroaniline	ND D,M	mg/Kg	890	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
4-Nitrophenol	ND D,M	mg/Kg	890	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
Acenaphthene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
Acenaphthylene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
Anthracene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
Benzo(a)anthracene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
Benzo[a]pyrene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
Benzo[b]fluoranthene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS

Reported: 11/16/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
 B Blank contaminant
 D Dilution
 J Estimated result
 M Matrix interference

000062



Sample ID:	3992779015	Matrix:	Non Aqueous Liquid				
Client Sample ID:	T-51	Location:					
Collected:	10/28/99 1:30:00PM	Project:	S05-9910-810				
Received:	11/2/99 1:36:25PM	Sampled By:	JK				
Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
Benzo[g,h,i]perylene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
Benzo[k]fluoranthene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
Bis(2-Chloroethoxy)methane	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
Bis(2-Chloroethyl)ether	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
bis(2-chloroisopropyl)ether	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
bis(2-Ethylhexyl)phthalate	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
Butylbenzylphthalate	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
Carbazole	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
Chrysene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
Di-n-butylphthalate	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
di-n-Octylphthalate	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
benzo[a,h]anthracene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
L,benzofuran	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
Diethylphthalate	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
Dimethylphthalate	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
Fluoranthene	270 D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
Fluorene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
Hexachlorobenzene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
Hexachlorobutadiene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
Hexachlorocyclopentadiene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
Hexachloroethane	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
Indeno[1,2,3-c,d] pyrene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
Isophorone	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
N-Nitroso-di-n-propylamine	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
N-Nitrosodiphenylamine	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
Naphthalene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
Nitrobenzene	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
Pentachlorophenol	ND D,M	mg/Kg	890	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
Phenanthrene	650 D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
Phenol	ND D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS
Pyrene	310 D,M	mg/Kg	220	SW-846 8270	11/10/99 16:53	11/12/99 18:3	JLS

GC SEMIVOLATILE ORGANIC ANALYSIS

Reported: 11/16/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

000063



CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID:	3992779015	Matrix:	Non Aqueous Liquid
Client Sample ID:	T-51	Location:	
Collected:	10/28/99 1:30:00PM	Project:	S05-9910-810
Received:	11/2/99 1:36:25PM	Sampled By:	JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC SEMIVOLATILE ORGANIC ANALYSIS							
Aroclor-1016	ND	mg/Kg	0.99	SW846 8082 PCB	11/8/99 17:12	11/10/99 19:2	TMJ
Aroclor-1221	ND	mg/Kg	0.99	SW846 8082 PCB	11/8/99 17:12	11/10/99 19:2	TMJ
Aroclor-1232	ND	mg/Kg	0.99	SW846 8082 PCB	11/8/99 17:12	11/10/99 19:2	TMJ
Aroclor-1242	ND	mg/Kg	0.99	SW846 8082 PCB	11/8/99 17:12	11/10/99 19:2	TMJ
Aroclor-1248	ND	mg/Kg	0.99	SW846 8082 PCB	11/8/99 17:12	11/10/99 19:2	TMJ
Aroclor-1254	ND	mg/Kg	0.99	SW846 8082 PCB	11/8/99 17:12	11/10/99 19:2	TMJ
Aroclor-1260	ND	mg/Kg	0.99	SW846 8082 PCB	11/8/99 17:12	11/10/99 19:2	TMJ
TCLP METAL ANALYSIS SW-846 Method 1311							
Arsenic	ND	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:3	HNL
Barium	0.33	mg/L	0.005	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:3	HNL
ium	ND	mg/L	0.005	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:3	HNL
Chromium	ND	mg/L	0.05	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:3	HNL
Lead	ND	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:3	HNL
Mercury	ND	mg/L	0.0002	SW-846 7470 TCLP	11/10/99 18:40	11/11/99 18:5	JL
Selenium	0.020	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:3	HNL
Silver	ND	mg/L	0.01	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:3	HNL

Respectfully submitted,
CT&E Environmental Services, Inc.


Linda J. Miller
 Project Manager, Michigan Division

Reported: 11/16/1999

Quantifiers Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
 B Blank contaminant
 D Dilution
 J Estimated result
 M Matrix interference

000064

CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID:	3992779016	Matrix:	Non Aqueous Liquid				
Client Sample ID:	TD-51	Location:					
Collected:	10/28/99 1:30:00PM	Project:	S05-9910-810				
Received:	11/2/99 1:36:25PM	Sampled By:	JK				
Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
TOTAL METALS ANALYSIS							
Arsenic	ND	mg/Kg	0.9	SW-846 6010	11/5/99 14:55	11/9/99 19:25	HNL
Barium	77	mg/Kg	0.4	SW-846 6010	11/5/99 14:55	11/9/99 19:25	HNL
Cadmium	0.61	mg/Kg	0.09	SW-846 6010	11/5/99 14:55	11/9/99 19:25	HNL
Chromium	13	mg/Kg	2	SW-846 6010	11/5/99 14:55	11/9/99 19:25	HNL
Lead	83	mg/Kg	0.4	SW-846 6010	11/5/99 14:55	11/9/99 19:25	HNL
Mercury	ND	mg/Kg	0.018	SW-846 7471	11/11/99 14:14	11/12/99 14:3	JL
Selenium	ND	mg/Kg	2	SW-846 6010	11/5/99 14:55	11/11/99 11:4	HNL
Silver	0.28	mg/Kg	0.04	SW-846 6010	11/5/99 14:55	11/11/99 11:4	HNL
GENERAL CHEMISTRY ANALYSIS							
Total Hazardous Halogens	ND	mg/Kg	650	SW-846 8021B	11/9/99 5:53	11/10/99 19:2	ORY
PHYSICAL PROPERTY ANALYSIS							
Flashpoint	>200	degree F		SW-846 1010		11/3/99 14:50	WD
GC VOLATILE ORGANIC ANALYSIS							
1,1,1-Trichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 19:2	ORY
1,1,2-Trichloro-1,2,2-fluoroet	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 19:2	ORY
1,1-Dichloroethylene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 19:2	ORY
1,2-Dichlorobenzene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 19:2	ORY
1,2-Dichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 19:2	ORY
Carbon tetrachloride	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 19:2	ORY
Chloroform	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 19:2	ORY
cis-1,2-Dichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 19:2	ORY
Dichlorodifluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 19:2	ORY
Methylene chloride	ND	mg/Kg	250	SW-846 8021B	11/9/99 5:53	11/10/99 19:2	ORY
Tetrachloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 19:2	ORY
Trichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 19:2	ORY
Trichlorofluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 19:2	ORY
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							

Reported: 11/16/1999

Qualifiers

- ND Not detected
- B Blank contaminant
- D Dilution
- J Estimated result
- M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

000065



Sample ID: 3992779016 Matrix: Non Aqueous Liquid
Client Sample ID: TD-51 Location:
Collected: 10/28/99 1:30:00PM Project: S05-9910-810
Received: 11/2/99 1:36:25PM Sampled By: JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
1,2,4-Trichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
1,2-Dichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
1,3-Dichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
1,4-Dichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
2,4,5-Trichlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
2,4,6-Trichlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
2,4-Dichlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
2,4-Dimethylphenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
2,4-Dinitrophenol	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
2,4-Dinitrotoluene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
2,6-Dinitrotoluene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
2-Methylnaphthalene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
2-Chlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
2-Methyl naphthalene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
2-Methyl-4,6-dinitrophenol	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
2-Methylphenol (o-Cresol)	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
2-Nitroaniline	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
2-Nitrophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
3&4-Methylphenol (p&m-Cresol)	ND D,M	mg/Kg	490	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
3,3-Dichlorobenzidine	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
3-Nitroaniline	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
4-Bromophenyl-phenylether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
4-Chloro-3-methylphenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
4-Chloroaniline	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
4-Chlorophenyl-phenylether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
4-Nitroaniline	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
4-Nitrophenol	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
Acenaphthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
Acenaphthylene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
Anthracene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
Benzo(a)anthracene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
Benzo[a]pyrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
Benzo[b]fluoranthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS

Reported: 11/16/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

000066



Sample ID: 3992779016 Matrix: Non Aqueous Liquid
Client Sample ID: TD-51 Location:
Collected: 10/28/99 1:30:00PM Project: S05-9910-810
Received: 11/2/99 1:36:25PM Sampled By: JK

Test Description	Result	Unit	Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
Benzo[g,h,i]perylene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
Benzo[k]fluoranthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
Bis(2-Chloroethoxy)methane	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
Bis(2-Chloroethyl)ether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
bis(2-chloroisopropyl)ether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
bis(2-Ethylhexyl)phthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
Butylbenzylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
Carbazole	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
Chrysene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
Di-n-butylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
di-n-Octylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
benzo[a,h]anthracene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
L.uenzofuran	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
Diethylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
Dimethylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
Fluoranthene	270 D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
Fluorene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
Hexachlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
Hexachlorobutadiene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
Hexachlorocyclopentadiene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
Hexachloroethane	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
Indeno[1,2,3-c,d] pyrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
Isophorone	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
N-Nitroso-di-n-propylamine	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
N-Nitrosodiphenylamine	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
Naphthalene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
Nitrobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
Pentachlorophenol	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
Phenanthrene	560 D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
Phenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS
Pyrene	310 D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 19:2	JLS

GC SEMIVOLATILE ORGANIC ANALYSIS

Reported: 11/16/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

000067



CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID:	3992779016	Matrix:	Non Aqueous Liquid
Client Sample ID:	TD-51	Location:	
Collected:	10/28/99 1:30:00PM	Project:	S05-9910-810
Received:	11/2/99 1:36:25PM	Sampled By:	JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
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GC SEMIVOLATILE ORGANIC ANALYSIS

Aroclor-1016	ND	mg/Kg	0.84	SW846 8082 PCB	11/8/99 17:12	11/10/99 19:5	TMJ
Aroclor-1221	ND	mg/Kg	0.84	SW846 8082 PCB	11/8/99 17:12	11/10/99 19:5	TMJ
Aroclor-1232	ND	mg/Kg	0.84	SW846 8082 PCB	11/8/99 17:12	11/10/99 19:5	TMJ
Aroclor-1242	ND	mg/Kg	0.84	SW846 8082 PCB	11/8/99 17:12	11/10/99 19:5	TMJ
Aroclor-1248	ND	mg/Kg	0.84	SW846 8082 PCB	11/8/99 17:12	11/10/99 19:5	TMJ
Aroclor-1254	ND	mg/Kg	0.84	SW846 8082 PCB	11/8/99 17:12	11/10/99 19:5	TMJ
Aroclor-1260	ND	mg/Kg	0.84	SW846 8082 PCB	11/8/99 17:12	11/10/99 19:5	TMJ

TCLP METAL ANALYSIS SW-846 Method 1311

Arsenic	ND	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:3	HNL
Barium	0.35	mg/L	0.005	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:3	HNL
nium	ND	mg/L	0.005	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:3	HNL
Chromium	ND	mg/L	0.05	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:3	HNL
Lead	ND	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:3	HNL
Mercury	ND	mg/L	0.0002	SW-846 7470 TCLP	11/10/99 18:40	11/11/99 18:5	JL
Selenium	0.024	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:3	HNL
Silver	ND	mg/L	0.01	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:3	HNL

Respectfully submitted,
CT&E Environmental Services, Inc.

Licela G. Miller
Project Manager, Michigan Division

Reported: 11/16/1999

Qualifiers

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

000068



CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID:	3992779017	Matrix:	Non Aqueous Liquid
Client Sample ID:	S-FE	Location:	
Collected:	10/28/99 1:45:00PM	Project:	S05-9910-810
Received:	11/2/99 1:36:25PM	Sampled By:	JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
TOTAL METALS ANALYSIS							
Arsenic	ND	mg/Kg	0.8	SW-846 6010	11/5/99 14:55	11/9/99 19:31	HNL
Barium	76	mg/Kg	0.4	SW-846 6010	11/5/99 14:55	11/9/99 19:31	HNL
Cadmium	ND	mg/Kg	0.08	SW-846 6010	11/5/99 14:55	11/9/99 19:31	HNL
Chromium	57	mg/Kg	2	SW-846 6010	11/5/99 14:55	11/9/99 19:31	HNL
Lead	25	mg/Kg	0.4	SW-846 6010	11/5/99 14:55	11/9/99 19:31	HNL
Mercury	0.075	mg/Kg	0.017	SW-846 7471	11/11/99 14:14	11/12/99 14:3	JL
Selenium	ND	mg/Kg	2	SW-846 6010	11/5/99 14:55	11/9/99 19:31	HNL
Silver	4.4	mg/Kg	0.04	SW-846 6010	11/5/99 14:55	11/9/99 19:31	HNL
GENERAL CHEMISTRY ANALYSIS							
Total Hazardous Halogens	ND	mg/Kg	650	SW-846 8021B	11/9/99 5:53	11/10/99 20:1	ORY
PHYSICAL PROPERTY ANALYSIS							
Flashpoint	>200	degree F		SW-846 1010		11/3/99 14:51	WD
GC VOLATILE ORGANIC ANALYSIS							
1,1,1-Trichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 20:1	ORY
1,1,2-Trichloro-1,2,2-fluoroet	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 20:1	ORY
1,1-Dichloroethylene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 20:1	ORY
1,2-Dichlorobenzene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 20:1	ORY
1,2-Dichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 20:1	ORY
Carbon tetrachloride	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 20:1	ORY
Chloroform	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 20:1	ORY
cis-1,2-Dichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 20:1	ORY
Dichlorodifluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 20:1	ORY
Methylene chloride	ND	mg/Kg	250	SW-846 8021B	11/9/99 5:53	11/10/99 20:1	ORY
Tetrachloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 20:1	ORY
Trichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 20:1	ORY
Trichlorofluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 20:1	ORY

GC/MS SEMIVOLATILE ORGANIC ANALYSIS

Reported: 11/16/199

Qualifiers

- ND Not detected
- B Blank contaminant
- D Dilution
- J Estimated result
- M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

000069



Sample ID:	3992779017	Matrix:	Non Aqueous Liquid				
Client Sample ID:	S-FE	Location:					
Collected:	10/28/99 1:45:00PM	Project:	S05-9910-810				
Received:	11/2/99 1:36:25PM	Sampled By:	JK				
Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
1,2,4-Trichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
1,2-Dichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
1,3-Dichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
1,4-Dichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
2,4,5-Trichlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
2,4,6-Trichlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
2,4-Dichlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
2,4-Dimethylphenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
2,4-Dinitrophenol	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
2,4-Dinitrotoluene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
2,6-Dinitrotoluene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
1,4-Noronaphthalene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
2-Chlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
2-Methyl naphthalene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
2-Methyl-4,6-dinitrophenol	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
2-Methylphenol (o-Cresol)	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
2-Nitroaniline	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
2-Nitrophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
3&4-Methylphenol (p&m-Cresol)	ND D,M	mg/Kg	490	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
3,3-Dichlorobenzidine	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
3-Nitroaniline	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
4-Bromophenyl-phenylether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
4-Chloro-3-methylphenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
4-Chloroaniline	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
4-Chlorophenyl-phenylether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
4-Nitroaniline	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
4-Nitrophenol	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
Acenaphthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
Acenaphthylene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
Anthracene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
Benzo(a)anthracene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
Benzo[a]pyrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
Benzo[b]fluoranthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS

Reported: 11/16/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

000070



Sample ID:	3992779017	Matrix:	Non Aqueous Liquid				
Client Sample ID:	S-FE	Location:					
Collected:	10/28/99 1:45:00PM	Project:	S05-9910-810				
Received:	11/2/99 1:36:25PM	Sampled By:	JK				
Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
Benzo[g,h,i]perylene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
Benzo[k]fluoranthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
Bis(2-Chloroethoxy)methane	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
Bis(2-Chloroethyl)ether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
bis(2-chloroisopropyl)ether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
bis(2-Ethylhexyl)phthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
Butylbenzylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
Carbazole	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
Chrysene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
Di-n-butylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
di-n-Octylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
benzo[a,h]anthracene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
Luenzofuran	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
Diethylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
Dimethylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
Fluoranthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
Fluorene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
Hexachlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
Hexachlorobutadiene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
Hexachlorocyclopentadiene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
Hexachloroethane	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
Indeno[1,2,3-c,d] pyrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
Isophorone	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
N-Nitroso-di-n-propylamine	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
N-Nitrosodiphenylamine	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
Naphthalene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
Nitrobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
Pentachlorophenol	ND D,M	mg/Kg	990	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
Phenanthrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
Phenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS
Pyrene	290 D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 20:1	JLS

GC SEMIVOLATILE ORGANIC ANALYSIS

Reported: 11/16/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
 B Blank contaminant
 D Dilution
 J Estimated result
 M Matrix interference

000071



CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID:	3992779017	Matrix:	Non Aqueous Liquid
Client Sample ID:	S-FE	Location:	
Collected:	10/28/99 1:45:00PM	Project:	S05-9910-810
Received:	11/2/99 1:36:25PM	Sampled By:	JK

Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed	Analyst
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GC SEMIVOLATILE ORGANIC ANALYSIS

Aroclor-1016	ND	mg/Kg	0.99	SW846 8082 PCB	11/8/99 17:12	11/10/99 20:1	TMJ
Aroclor-1221	ND	mg/Kg	0.99	SW846 8082 PCB	11/8/99 17:12	11/10/99 20:1	TMJ
Aroclor-1232	ND	mg/Kg	0.99	SW846 8082 PCB	11/8/99 17:12	11/10/99 20:1	TMJ
Aroclor-1242	ND	mg/Kg	0.99	SW846 8082 PCB	11/8/99 17:12	11/10/99 20:1	TMJ
Aroclor-1248	ND	mg/Kg	0.99	SW846 8082 PCB	11/8/99 17:12	11/10/99 20:1	TMJ
Aroclor-1254	ND	mg/Kg	0.99	SW846 8082 PCB	11/8/99 17:12	11/10/99 20:1	TMJ
Aroclor-1260	ND	mg/Kg	0.99	SW846 8082 PCB	11/8/99 17:12	11/10/99 20:1	TMJ

TCLP METAL ANALYSIS SW-846 Method 1311

Arsenic	ND	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:4	HNL
Barium	0.31	mg/L	0.005	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:4	HNL
Chromium	ND	mg/L	0.005	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:4	HNL
Lead	ND	mg/L	0.05	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:4	HNL
Mercury	ND	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:4	HNL
Selenium	ND	mg/L	0.0002	SW-846 7470 TCLP	11/10/99 18:40	11/11/99 18:5	JL
Silver	ND	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:4	HNL
	ND	mg/L	0.01	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:4	HNL

Respectfully submitted,
CT&E Environmental Services, Inc.

Linda D. Dill
Project Manager, Michigan Division

Reported: 11/16/1999

Qualifiers

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

000072



CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID:	3992779018	Matrix:	Non Aqueous Liquid
Client Sample ID:	5-G	Location:	
Collected:	10/28/99 1:50:00PM	Project:	S05-9910-810
Received:	11/2/99 1:36:25PM	Sampled By:	JK

Test Description	Result	Unit	Limit	Method	Prepared	Analyzed	Analyst
TOTAL METALS ANALYSIS							
Arsenic	ND	mg/Kg	0.8	SW-846 6010	11/5/99 14:55	11/9/99 19:36	HNL
Barium	500	mg/Kg	0.4	SW-846 6010	11/5/99 14:55	11/9/99 19:36	HNL
Cadmium	ND	mg/Kg	0.08	SW-846 6010	11/5/99 14:55	11/9/99 19:36	HNL
Chromium	ND	mg/Kg	2	SW-846 6010	11/5/99 14:55	11/9/99 19:36	HNL
Lead	1.3 _M	mg/Kg	0.4	SW-846 6010	11/5/99 14:55	11/11/99 11:5	HNL
Mercury	ND	mg/Kg	0.018	SW-846 7471	11/11/99 14:14	11/12/99 14:3	JL
Selenium	ND	mg/Kg	2	SW-846 6010	11/5/99 14:55	11/11/99 11:5	HNL
Silver	0.040 _M	mg/Kg	0.04	SW-846 6010	11/5/99 14:55	11/11/99 11:5	HNL
GENERAL CHEMISTRY ANALYSIS							
Total Hazardous Halogens	ND	mg/Kg	650	SW-846 8021B	11/9/99 5:53	11/10/99 21:0	ORY
PHYSICAL PROPERTY ANALYSIS							
Flashpoint	>200	degree F		SW-846 1010		11/3/99 14:51	WD
GC VOLATILE ORGANIC ANALYSIS							
1,1,1-Trichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 21:0	ORY
1,1,2-Trichloro-1,2,2-fluoroet	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 21:0	ORY
1,1-Dichloroethylene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 21:0	ORY
1,2-Dichlorobenzene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 21:0	ORY
1,2-Dichloroethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 21:0	ORY
Carbon tetrachloride	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 21:0	ORY
Chloroform	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 21:0	ORY
cis-1,2-Dichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 21:0	ORY
Dichlorodifluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 21:0	ORY
Methylene chloride	ND	mg/Kg	250	SW-846 8021B	11/9/99 5:53	11/10/99 21:0	ORY
Tetrachloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 21:0	ORY
Trichloroethene	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 21:0	ORY
Trichlorofluoromethane	ND	mg/Kg	50	SW-846 8021B	11/9/99 5:53	11/10/99 21:0	ORY

GC/MS SEMIVOLATILE ORGANIC ANALYSIS

Reported: 11/16/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

000073



Sample ID: 3992779018 **Matrix:** Non Aqueous Liquid
Client Sample ID: 5-G **Location:**
Collected: 10/28/99 1:50:00PM **Project:** S05-9910-810
Received: 11/2/99 1:36:25PM **Sampled By:** JK

Test Description	Result	Unit	Limit	Method	Prepared	Analyzed	Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS							
1,2,4-Trichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1	JLS
1,2-Dichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1	JLS
1,3-Dichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1	JLS
1,4-Dichlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1	JLS
2,4,5-Trichlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1	JLS
2,4,6-Trichlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1	JLS
2,4-Dichlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1	JLS
2,4-Dimethylphenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1	JLS
2,4-Dinitrophenol	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/12/99 21:1	JLS
2,4-Dinitrotoluene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1	JLS
2,6-Dinitrotoluene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1	JLS
¹ chloronaphthalene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1	JLS
² Chlorophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1	JLS
2-Methyl naphthalene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1	JLS
2-Methyl-4,6-dinitrophenol	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/12/99 21:1	JLS
2-Methylphenol (o-Cresol)	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1	JLS
2-Nitroaniline	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/12/99 21:1	JLS
2-Nitrophenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1	JLS
3&4-Methylphenol (p&m-Cresol)	ND D,M	mg/Kg	490	SW-846 8270	11/10/99 16:53	11/12/99 21:1	JLS
3,3-Dichlorobenzidine	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/12/99 21:1	JLS
3-Nitroaniline	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/12/99 21:1	JLS
4-Bromophenyl-phenylether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1	JLS
4-Chloro-3-methylphenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1	JLS
4-Chloroaniline	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/12/99 21:1	JLS
4-Chlorophenyl-phenylether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1	JLS
4-Nitroaniline	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/12/99 21:1	JLS
4-Nitrophenol	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/12/99 21:1	JLS
Acenaphthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1	JLS
Acenaphthylene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1	JLS
Anthracene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1	JLS
Benzo(a)anthracene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1	JLS
Benzo[a]pyrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1	JLS
Benzo[b]fluoranthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1	JLS

Reported: 11/16/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
 B Blank contaminant
 D Dilution
 J Estimated result
 M Matrix interference

000074



Sample ID:	3992779018	Matrix:	Non Aqueous Liquid			
Client Sample ID:	5-G	Location:				
Collected:	10/28/99 1:50:00PM	Project:	S05-9910-810			
Received:	11/2/99 1:36:25PM	Sampled By:	JK			
Test Description	Result	Unit	Reporting Detection Limit	Method	Prepared	Analyzed Analyst
GC/MS SEMIVOLATILE ORGANIC ANALYSIS						
Benzo[g,h,i]perylene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1 JLS
Benzo[k]fluoranthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1 JLS
Bis(2-Chloroethoxy)methane	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1 JLS
Bis(2-Chloroethyl)ether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1 JLS
bis(2-chloroisopropyl)ether	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1 JLS
bis(2-Ethylhexyl)phthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1 JLS
Butylbenzylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1 JLS
Carbazole	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1 JLS
Chrysene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1 JLS
Di-n-butylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1 JLS
di-n-Octylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1 JLS
benzo[a,h]anthracene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1 JLS
L-Benzofuran	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1 JLS
Diethylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1 JLS
Dimethylphthalate	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1 JLS
Fluoranthene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1 JLS
Fluorene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1 JLS
Hexachlorobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1 JLS
Hexachlorobutadiene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1 JLS
Hexachlorocyclopentadiene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1 JLS
Hexachloroethane	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1 JLS
Indeno[1,2,3-c,d] pyrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1 JLS
Isophorone	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1 JLS
N-Nitroso-di-n-propylamine	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1 JLS
N-Nitrosodiphenylamine	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1 JLS
Naphthalene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1 JLS
Nitrobenzene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1 JLS
Pentachlorophenol	ND D,M	mg/Kg	980	SW-846 8270	11/10/99 16:53	11/12/99 21:1 JLS
Phenanthrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1 JLS
Phenol	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1 JLS
Pyrene	ND D,M	mg/Kg	250	SW-846 8270	11/10/99 16:53	11/12/99 21:1 JLS

GC SEMIVOLATILE ORGANIC ANALYSIS

Reported: 11/16/199

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

000075



CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID: 3992779018 Matrix: Non Aqueous Liquid
Client Sample ID: 5-G Location:
Collected: 10/28/99 1:50:00PM Project: S05-9910-810
Received: 11/2/99 1:36:25PM Sampled By: JK

Test Description	Result	Unit	Limit	Method	Prepared	Analyzed	Analyst
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GC SEMIVOLATILE ORGANIC ANALYSIS

Aroclor-1016	ND	mg/Kg	0.98	SW846 8082 PCB	11/8/99 17:12	11/10/99 20:4	TMJ
Aroclor-1221	ND	mg/Kg	0.98	SW846 8082 PCB	11/8/99 17:12	11/10/99 20:4	TMJ
Aroclor-1232	ND	mg/Kg	0.98	SW846 8082 PCB	11/8/99 17:12	11/10/99 20:4	TMJ
Aroclor-1242	ND	mg/Kg	0.98	SW846 8082 PCB	11/8/99 17:12	11/10/99 20:4	TMJ
Aroclor-1248	ND	mg/Kg	0.98	SW846 8082 PCB	11/8/99 17:12	11/10/99 20:4	TMJ
Aroclor-1254	ND	mg/Kg	0.98	SW846 8082 PCB	11/8/99 17:12	11/10/99 20:4	TMJ
Aroclor-1260	ND	mg/Kg	0.98	SW846 8082 PCB	11/8/99 17:12	11/10/99 20:4	TMJ

TCLP METAL ANALYSIS SW-846 Method 1311

Arsenic	ND	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:4	HNL
Barium	0.92	mg/L	0.005	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:4	HNL
Manganese	ND	mg/L	0.005	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:4	HNL
Chromium	ND	mg/L	0.05	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:4	HNL
Lead	ND	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:4	HNL
Mercury	ND	mg/L	0.0002	SW-846 7470 TCLP	11/10/99 18:40	11/11/99 18:5	JL
Selenium	ND	mg/L	0.02	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:4	HNL
Silver	ND	mg/L	0.01	SW-846 6010 TCLP	11/8/99 7:09	11/10/99 20:4	HNL

Respectfully submitted,
CT&E Environmental Services, Inc.

Linda G. Dunc
Project Manager, Michigan Division

Reported: 11/16/1999

Qualifiers

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

000076



CT&E Environmental Services Inc.

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Ecology and Environment, Inc.

Sample ID:	3992779019	Matrix:	Aqueous
Client Sample ID:	PH-1	Location:	
Collected:	10/28/99 12:15:00PM	Project:	S05-9910-810
Received:	11/2/99 1:36:25PM	Sampled By:	JK

Test Description	Result	Unit	Limit	Method	Reporting Detection	Prepared	Analyzed	Analyst
PHYSICAL PROPERTY ANALYSIS								
Corrosivity pH Analysis	Corrosive			SW 9040B		11/9/99 15:10	SKP	
pH		pH units		SW 9040B	Sample pH < 1 S.U.	11/9/99 15:10	SKP	

Respectfully submitted,
CT&E Environmental Services, Inc.

(Signature)
Project Manager, Michigan Division

Reported: 11/16/199

Classifiers

- ND Not detected
- B Blank contaminant
- D Dilution
- J Estimated result
- M Matrix interference

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

000077

Appendix B

Photodocumentation



Site: Egan Marine
Direction: West
Location: Lemont, Illinois
Subject: Old drum staging area north of horizontal tanks.

Date: October 28, 1999
Time: 1103
Photographer: J. Klemp



Site: Egan Marine
Direction: West
Location: Lemont, Illinois
Subject: Old drum staging area north of horizontal tanks.

Date: October 28, 1999
Time: 1103
Photographer: J. Klemp



Site: Egan Marine
Direction: West
Location: Lemont, Illinois
Subject: Old drum staging area north of horizontal tanks.

Date: October 28, 1999
Time: 1103
Photographer: J. Klemp



Site: Egan Marine
Direction: West
Location: Lemont, Illinois
Subject: Old drum staging area north of horizontal tanks.

Date: October 28, 1999
Time: 1103
Photographer: J. Klemp

3



Site: Egan Marine
Direction: West
Location: Lemont, Illinois
Subject: View of horizontal tanks and drums on western peninsula.

Date: October 28, 1999
Time: 1104
Photographer: J. Klemp



Site: Egan Marine
Direction: Down
Location: Lemont, Illinois
Subject: View of oxygen tank stored on the ground east of drums.

Date: October 28, 1999
Time: 1105
Photographer: J. Klemp



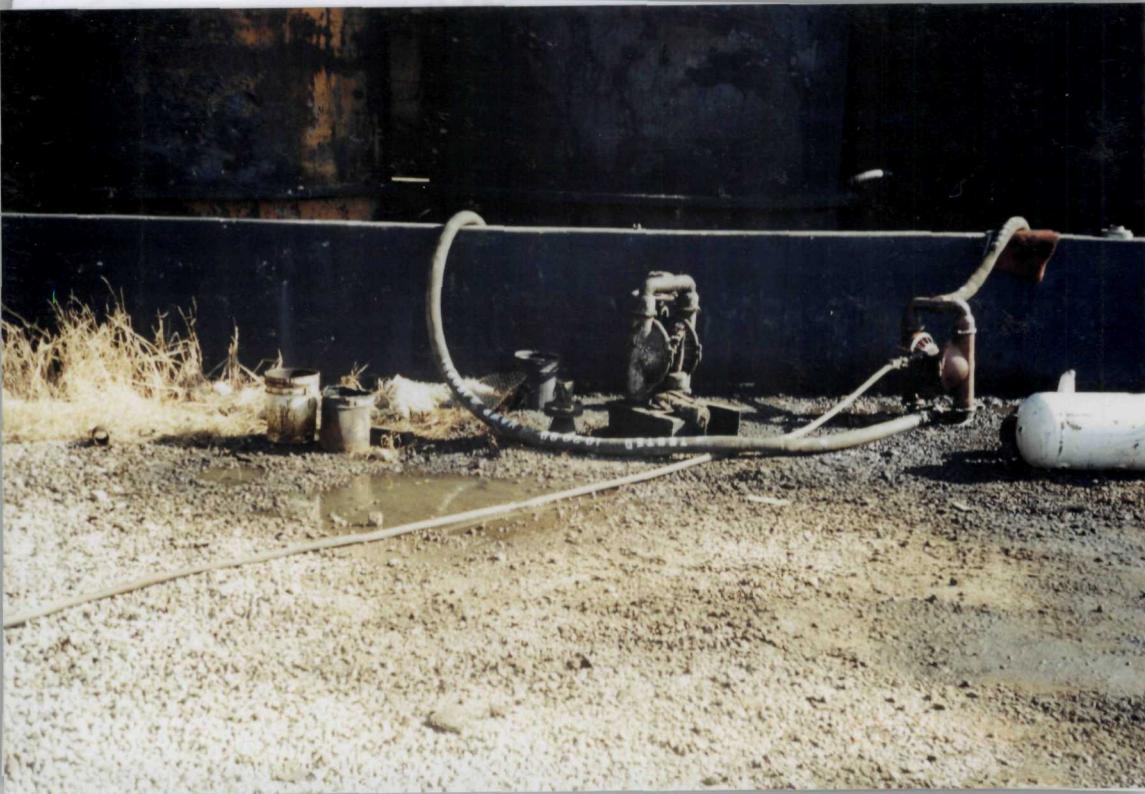
Site: Egan Marine
Direction: South
Location: Lemont, Illinois
Subject: View of water on ground east of tank farm.

Date: October 28, 1999
Time: 1106
Photographer: J. Klemp



Site: Egan Marine
Direction: North
Location: Lemont, Illinois
Subject: Vertical and horizontal tanks reported to contain sulfuric acid.

Date: October 28, 1999
Time: 1108
Photographer: J. Klemp



Site: Egan Marine
Direction: East
Location: Lemont, Illinois
Subject: View of water-stained soil west of tank farm.

Date: October 28, 1999
Time: 1109
Photographer: J. Klemp



Site: Egan Marine
Direction: Southeast
Location: Lemont, Illinois
Subject: View of waste soil pile.

Date: October 28, 1999
Time: 1110
Photographer: J. Klemp



Site: Egan Marine
Direction: North
Location: Lemont, Illinois
Subject: View of oil-soaked absorbent boom on waste soil pile.

Date: October 28, 1999
Time: 1114
Photographer: J. Klemp



Site: Egan Marine
Direction: Down
Location: Lemont, Illinois
Subject: View of oil seeping from the west side of waste soil pile

Date: October 28, 1999
Time: 1115
Photographer: J. Klemp

8



Site: Egan Marine
Direction: Northeast
Location: Lemont, Illinois
Subject: View of waste sheet metal on ground west of tank farm.

Date: October 28, 1999
Time: 1116
Photographer: J. Klemp



Site: Egan Marine
Direction: Northeast
Location: Lemont, Illinois
Subject: View of 55-gallon drums denoted as Therma C Oil.

Date: October 28, 1999
Time: 1119
Photographer: J. Klemp



Site: Egan Marine
Direction: North
Location: Lemont, Illinois
Subject: View of 55-gallon drums labeled as corrosive.

Date: October 28, 1999
Time: 1124
Photographer: J. Klemp



Site: Egan Marine
Direction: North
Location: Lemont, Illinois
Subject: Location of soil sample S1.

Date: October 28, 1999
Time: 1328
Photographer: J. Klemp

01

9



Site: Egan Marine
Direction: West
Location: Lemont, Illinois
Subject: Location of soil sample SE1.

Date: October 28, 1999
Time: 1329
Photographer: J. Klemp



Site: Egan Marine
Direction: Down
Location: Lemont, Illinois
Subject: Location of soil samples W1 and W1D.

Date: October 28, 1999
Time: 1330
Photographer: J. Klemp



Site: Egan Marine
Direction: Down
Location: Lemont, Illinois
Subject: Drum marked nonhazardous from which sample D-1 was collected.

Date: October 28, 1999
Time: 1150
Photographer: J. Klemp



Site: Egan Marine
Direction: North
Location: Lemont, Illinois
Subject: Tank farm south of maintenance building, location of tank samples T4, T13 and T14.

Date: October 28, 1999
Time: 1340
Photographer: J. Klemp

51



Site: Egan Marine
Direction: Down
Location: Lemont, Illinois
Subject: Location of soil sample SO1.

Date: October 28, 1999
Time: 1345
Photographer: J. Klemp



Site: Egan Marine
Direction: Northeast
Location: Lemont, Illinois
Subject: Drums south of horizontal tanks (Note: drum marked in white is the location of sample D1A).

Date: October 28, 1999
Time: 1346
Photographer: J. Klemp



12

Site: Egan Marine

Direction: Northeast

Location: Lemont, Illinois

Subject: Drums south of horizontal tank (Note: drum with open lid is the location of sample D2).

Date: October 28, 1999

Time: 1347

Photographer: J. Klemp



11

Site: Egan Marine

Direction: East

Location: Lemont, Illinois

Subject: Drums marked Therma C Oil and location of samples D3 and D4.

Date: October 28, 1999

Time: 1350

Photographer: J. Klemp

13



Site: Egan Marine
Direction: South
Location: Lemont, Illinois
Subject: Empty drums staged behind building on east end of site.

Date: October 28, 1999
Time: 1400
Photographer: J. Klemp



Site: Egan Marine
Direction: East
Location: Lemont, Illinois
Subject: 5-gallon bucket from which sample 5-G was collected.

Date: October 28, 1999
Time: 1410
Photographer: J. Klemp

Appendix C

RCMS Cost Projection

=====
Cost Summary

Page: 1

Projection Name: Egan Marine (CERCLA)
Projection Type: Initial

Date: 02/29/00
Prime Contractor: EQM5

CONTRACTOR

Personnel Cost	142996
Equipment Cost	160953
Other Direct Cost	726643
Total for Contractor	1030592
Contractor Contingency: 25%	257648
Including Contractor Contingency:	1288240
Site Contingency: 25%	257648
Including Site Contingency:	1545888

GOVERNMENT

Personnel Cost	
EPA	63018
TAT	58760
	121778
Equipment Cost	
	0
Other Direct Cost	
EPA	300
TAT	300
	600
Total for Government	122378
Site Contingency: 25%	30595
Including Site Contingency:	152973
PROJECT TOTAL	1698861

Cost Summary by Task Code

Page: 1

Projection Name: Egan Marine (CERCLA)
Projection Type: Initial

Date: 02/29/00

Prime Contractor: EQMS

	Personnel Cost	Equipment Cost	Other Cost	Total Cost
--	----------------	----------------	------------	------------

Task: Administrative (06) 01/01/00 - 03/01/00

Contractor Projection:	45248	7735	20250	73233
Contractor Archive:	0	0	0	0
Government Projection:	121778	0	600	122378
Government Archive:	0	0	0	0

Task: Mobilization/Demob (09) 01/01/00 - 03/01/00

Contractor Projection:	3275	8367	783	12425
Contractor Archive:	0	0	0	0

Task: Operations (13) 01/01/00 - 03/01/00

Contractor Projection:	94473	144851	705610	944934
Contractor Archive:	0	0	0	0

Cost Summary by Task Code

Page: 2

Projection Name: Egan Marine (CERCLA)

Date: 02/29/00

Projection Type: Initial

Prime Contractor: EQMS

	Personnel Cost	Equipment Cost	Other Cost	Total Cost
--	----------------	----------------	------------	------------

(Contractor Subtotals:)	142996	160953	726643	1030592
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(Government Subtotals:)	121778	0	600	122378
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CONTRACTOR

=====

(Contractor Contingency:25.00%)	35749	40238	181661	257648
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(Including Contractor Contingency)	178745	201191	908304	1288240
------------------------------------	--------	--------	--------	---------

(Site Contingency:25.00%)	35749	40238	181661	257648
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(Including Site Contingency)	214494	241430	1089965	1545888
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GOVERNMENT

=====

(Site Contingency:25.00%)	30445	0	150	30595
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(Including Site Contingency)	152223	0	750	152973
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PROJECT TOTAL

=====

	Personnel Cost	Equipment Cost	Other Cost	Total Cost
--	----------------	----------------	------------	------------

	366717	241430	1090715	1698861
--	--------	--------	---------	---------

Government

All Costs by Task Code

Page: 1

Projection Name: Egan Marine (CERCLA)

Date: 02/29/00

Task:Administrative (06) 01/01/00 - 03/01/00

Projection Type: Initial

PERSONNEL

		Ctr.	Regular	O.T.	Regular	O.T.	No. of	Projection	Archive	Total
CLIN	Job Description	Code	Hrs/Day	Hrs/Day	Rate	Rate	Qty	Days	Cost	Cost
S1-05-01	On Scene Coordinator	EPA	8.0	2.0	35.00	35.00	1	65	63018	63018
S4-17-01	Engineer/Environment	TAT	8.0	2.0	40.00	40.00	1	65	58760	58760
(Subtotals:)										
								121778	0.00	121778

EQUIPMENT

CLIN	Equipment Description	Ctr.	Hrs/ Code	Reg Day	Mob Qty	Stby Days	Decon Days	Projection Cost	Archive Cost	Total Cost
										0
(Subtotals:)										
								0	0.00	0

OTHER

Ctr. Vend							Projection	Archive	Total
Description	Code	Code	Cost Type	Billing	Unit	Cost	Qty	Cost	Cost
Fuel-Gasoline	EPA	Fuel		Purchase	1.50	Gal	200.0	300	300
Fuel-Gasoline	TAT	Fuel			1.50	Gal	200.0	300	300
				(Subtotals:)			600	0.00	600
					=====	=====	=====	=====	=====
				(Totals for Task Code: 06)			122,378	0.00	122,378
				(Projection Totals:)			122,378	0.00	122,378
				(Site Contingency:25.00%)			152,973		152,973

Contractor
All Costs by Task Code

Page: 1

Projection Name: Egan Marine (CERCLA) Date: 02/29/00

Task:Administrative (06) 01/01/00 - 03/01/00

Projection Type: Initial

PERSONNEL

CLIN	Job Description	Ctr.	Regular	O.T.	Regular	O.T.	No. of		Projection	Archive	Total
		Code	Hrs/Day	Hrs/Day	Rate	Rate	Qty	Days	Cost	Cost	Cost
S1-05-01	Response Manager	EQM5	8.0	2.0	35.86	47.69	1	65	24847		24847
S2-13-01	Field Cost Admin.	EQM5	8.0	2.0	24.30	32.32	1	65	16838		16838
S4-01-01	Chemist	EQM5	8.0	0.0	36.06	36.06	1	5	1442		1442
S5-20-01	T&D Coordinator	EQM5	8.0	0.0	53.03	0.00	1	5	2121		2121
(Subtotals:)								45248	0.00		45248

EQUIPMENT

CLIN	Equipment Description	Ctr.	Hrs/	Reg	Mob	Stby	Decon	Projection	Archive	Total
		Code	Day	Qty	Days	Days	Days	Cost	Cost	Cost
10910	Car-Passenger	EQM5	8.0	1	65	2	2	0	2600	2600
	HR:0.00 DR:37.68 WR:0.00									
13610	Pickup-2 wheel drive	EQM5	8.0	1	65	2	2	0	3119	3119
	HR:0.00 DR:45.21 WR:0.00									
25520	Office-8x20	EQM5	8.0	1	65	2	2	2	900	900
	HR:0.00 DR:0.00 WR:0.00									
72320	Computer-Portable PC	EQM5	8.0	1	65	0	0	0	666	666
	HR:0.00 DR:10.25 WR:0.00									
72340	Computer-Laser Printer	EQM5	8.0	1	65	0	0	0	150	150
	HR:0.00 DR:0.00 WR:0.00									
73110	Copier-	EQM5	8.0	1	65	0	0	0	150	150
	HR:0.00 DR:0.00 WR:0.00									
74510	Facsimile Machine-	EQM5	8.0	1	65	0	0	0	150	150
	HR:0.00 DR:0.00 WR:0.00									
(Subtotals:)								7735	0.00	7735

Contractor
All Costs by Task Code

Page: 2

Projection Name: Egan Marine (CERCLA)
Task:Administrative (06) 01/01/00 - 03/01/00

Date: 02/29/00
Projection Type: Initial

OTHER

Description	Ctr.	Vend	Billing	Unit	Cost	Units	Qty	Projection Cost	Archive Cost	Total Cost
Fuel-Gasoline	EQM5	Fuel		1.50	Gal	500.0	750			750
Lodging	EQM5	Lodging	Sub Contr	13520.00	Bulk	1.0	13520			13520
Perdiem	EQM5	Perdiem	Sub Contr	5980.00	Bulk	1.0	5980			5980
(Subtotals:)						20250		0.00		20250
(Totals for Task Code: 06)						73,233		0.00		73,233

Contractor

All Costs by Task Code

Page: 3

Projection Name: Egan Marine (CERCLA)

Date: 02/29/00

Task: Mobilization/Demob (09) 01/01/00 - 03/01/00

Projection Type: Initial

PERSONNEL

CLIN	Job Description	Ctr. Code	Regular Hrs/Day	O.T. Hrs/Day	Regular Rate	O.T. Rate	No. of Qty	Days	Projection Cost	Archive Cost	Total Cost
S1-05-01	Response Manager	EQM5	8.0	0.0	35.86	47.69	1	2	574		574
S1-10-01	Foreman	EQM5	8.0	0.0	34.29	45.61	1	2	549		549
S2-03-01	Clean-Up Technician	EQM5	8.0	0.0	22.45	29.86	2	2	718		718
S2-05-01	Equipment Operator	EQM5	8.0	0.0	32.65	43.42	2	2	1045		1045
S2-13-01	Field Cost Admin.	EQM5	8.0	0.0	24.30	32.32	1	2	389		389
(Subtotals:)									3275	0.00	3275

EQUIPMENT

CLIN	Equipment Description	Ctr. Code	Hrs/ Day	Reg Qty	Mob Days	Stby Days	Decon Days	Projection Cost	Archive Cost	Total Cost	
'0	Car-Passenger	EQM5	8.0	1	2	0	0	0	75	75	
	HR:0.00 DR:37.68 WR:0.00 MR:0.00										
13610	Pickup-2 wheel drive	EQM5	8.0	1	2	0	0	0	90	90	
	HR:0.00 DR:45.21 WR:0.00 MR:0.00										
13620	Pickup-4 wheel drive	EQM5	8.0	1	2	0	0	0	115	115	
	HR:0.00 DR:57.41 WR:0.00 MR:0.00										
14510	Stakebed-1 ton	EQM5	8.0	1	2	0	0	0	174	174	
	HR:0.00 DR:87.14 WR:0.00 MR:0.00										
24530	Lowboy-30 ton	EQM5	8.0	1	2	2	2	2	779	779	
	HR:0.00 DR:97.39 WR:0.00 MR:0.00										
33055	Excavator-CAT 215C	EQM5	8.0	1	2	2	2	2	2788	2788	
	HR:0.00 DR:348.55 WR:0.00 MR:0.00										
36050	Loader/Wheel-CAT 950E 3.5 cyd	EQM5	8.0	1	2	2	2	2	2706	2706	
	HR:0.00 DR:338.30 WR:0.00 MR:0.00										
37010	Shears-Boom attachmnt/small	EQM5	8.0	1	2	2	2	2	1640	1640	
	HR:0.00 DR:205.03 WR:0.00 MR:0.00										
(Subtotals:)									8367	0.00	8367

Contractor

All Costs by Task Code

Page: 4

Projection Name: Egan Marine (CERCLA)

Date: 02/29/00

Task :Mobilization/Demob (09) 01/01/00 - 03/01/00

Projection Type: Initial

OTHER

Ctr. Vend

Description	Code	Code	Cost	Type	Billing	Unit	Cost	Units	Qty	Cost	Cost	Cost
Diesel/Gasoline	EQM5	Fuel				1.50	Gal		100.0	150		150
Fuel-Gasoline	EQM5	Fuel			Purchase	1.50	Gal		100.0	150		150
Perdiem	EQM5	Perdiem			Sub Contr	483.00	Bulk		1.0	483		483
						-----	-----	-----	-----	-----	-----	-----
					(Subtotals:)				783	0.00		783
						=====	=====	=====	=====	=====	=====	=====
					(Totals for Task Code: 09)				12,425	0.00		12,425

Contractor

All Costs by Task Code

Page: 5

Projection Name: Egan Marine (CERCLA)

Date: 02/29/00

Task:Operations (13) 01/01/00 - 03/01/00

Projection Type: Initial

PERSONNEL

		Ctr.	Regular	O.T.	Regular	O.T.	No. of		Projection	Archive	Total
CLIN	Job Description	Code	Hrs/Day	Hrs/Day	Rate	Rate	Qty	Days	Cost	Cost	Cost
S1-10-01	Foreman	EQMS	8.0	2.0	34.29	45.61	1	65	23760		23760
S2-03-01	Clean-Up Technician	EQMS	8.0	2.0	22.45	29.86	2	65	31112		31112
S2-05-01	Equipment Operator	EQMS	8.0	1.0	32.65	43.42	2	65	39601		39601
<hr/>											
(Subtotals:)								94473	0.00	94473	

EQUIPMENT

Contractor

All Costs by Task Code

Page : 6

Projection Name: Egan Marine (CERCLA)

Date: 02/29/00

Task:Operations (13) 01/01/00 - 03/01/00

Projection Type: Initial

EQUIPMENT

Contractor

All Costs by Task Code

Page: 7

Projection Name: Egan Marine (CERCLA)

Date: 02/29/00

Task:Operations (13) 01/01/00 - 03/01/00

Projection Type: Initial

EQUIPMENT

CLIN	Equipment Description	Ctr. Code	Hrs/ Day	Reg Qty	Mob Days	Stby Days	Decon Days	Projection Cost	Archive Cost	Total Cost
79612	Water Laser-HI-Pressure Single	EQM5	8.0	1	65	2	2	0	17684	17684
	HR:0.00 DR:256.29 WR:0.00 MR:0.00									
80120	Acid-2 inches	EQM5	8.0	1	65	2	2	2	5241	5241
	HR:0.00 DR:73.81 WR:0.00 MR:0.00									
85420	Trash-4 inch	EQM5	8.0	1	65	2	2	2	6405	6405
	HR:0.00 DR:90.21 WR:0.00 MR:0.00									
90505	Boom-Harbor 6"-12" Skirt	EQM5	8.0	1	65	2	2	2	8370	8370
	HR:0.00 DR:117.89 WR:0.00 MR:0.00									
(Subtotals:)									144851	0.00
-----									-----	144851

OTHER

Description	Ctr. Vend Code	Cost Code	Type	Billing	Unit Cost	Units	Qty	Projection Cost	Archive Cost	Total Cost
Disposal-Acids	EQM5	Disposal	Purchase		3.00 Gal	10000.0	30000			30000
Disposal-Drums	EQM5	Disposal	Sub Contr		100.00 Each	1500.0	150000			150000
Disposal-Waste oil	EQM5	Disposal			3.00 Gal	50000.0	150000			150000
Fuel-Diesel	EQM5	Fuel			1.20 Gal	300.0	360			360
Fuel-Gasoline	EQM5	Fuel			1.50 Gal	600.0	900			900
Lodging	EQMS	Lodging	Sub Contr		33800.00 Bulk	1.0	33800			33800
Perdiem	EQMS	Perdiem	Sub Contr		14950.00 Bulk	1.0	14950			14950
Utilities-Electric	EQMS	Utilities			500.00 Bulk	1.0	500			500
Utilities-Water	EQMS	Utilities			100.00 Bulk	1.0	100			100
Waste soil	EQM5	Disposal			65.00 Tons	5000.0	325000			325000
(Subtotals:)									705610	0.00
=====									705610	705610
(Totals for Task Code: 13)									944,934	0.00
=====									944,934	944,934

(Projection Totals:)	1,030,592	0.00	1,030,592
(Contractor Contingency:25.00%)	1,288,240		1,288,240
(Site Contingency:25.00%)	1,545,888		1,545,888

Government
All Costs by Task Code

Page: 1

Projection Name: Egan Marine (CERCLA)
Task:Administrative (06) 01/01/00 - 03/01/00

Date: 02/29/00
Projection Type: Initial

PERSONNEL

CLIN	Job Description	Ctr.	Regular	O.T.	Regular	O.T.	No. of Qty	Days	Projection	Archive	Total
		Code	Hrs/Day	Hrs/Day	Rate	Rate			Cost	Cost	Cost
S1-05-01	On Scene Coordinator	EPA	8.0	2.0	35.00	35.00	1	65	63018		63018
S4-17-01	Engineer/Environment	TAT	8.0	2.0	40.00	40.00	1	65	58760		58760
(Subtotals:)								121778	0.00	121778	

EQUIPMENT

CLIN	Equipment Description	Ctr.	Hrs/	Reg	Mob	Stby	Decon	Projection	Archive	Total		
		Code	Day	Qty	Days	Days	Days	Cost	Cost	Cost		
(Subtotals:)										0	0.00	0

OTHER

Description	Ctr. Vend				Billing	Unit Cost	Units	Qty	Projection	Archive	Total
	Code	Code	Cost	Type					Cost	Cost	
Fuel-Gasoline	EPA	Fuel			Purchase	1.50	Gal	200.0	300		300
Fuel-Gasoline	TAT	Fuel				1.50	Gal	200.0	300		300
(Subtotals:)								600	0.00	600	
(Totals for Task Code: 06)								122,378	0.00	122,378	
(Projection Totals:)								122,378	0.00	122,378	
(Site Contingency:25.00%)								152,973	0.00	152,973	

CERCLA Costs

=====
Cost Summary

Page: 1

Projection Name: Egan Marine (CERCLA)
Projection Type: Initial

Date: 02/29/00
Prime Contractor: EQMS

CONTRACTOR

Personnel Cost	48733
Equipment Cost	26222
Other Direct Cost	204243
Total for Contractor	279198
Contractor Contingency: 25%	69800
Including Contractor Contingency:	348998
Site Contingency: 25%	69800
Including Site Contingency:	418797

GOVERNMENT

Personnel Cost	
EPA	19390
TAT	18080
	37470
Equipment Cost	
	0
Other Direct Cost	
EPA	300
TAT	300
	600
Total for Government	38070
Site Contingency: 25%	9518
Including Site Contingency:	47588

PROJECT TOTAL

466385

Cost Summary by Task Code

Page: 1

Projection Name: Egan Marine (CERCLA)

Date: 02/29/00

Projection Type: Initial

Prime Contractor: EQMS

	Personnel Cost	Equipment Cost	Other Cost	Total Cost
Task: Administrative (06) 01/01/00 - 03/01/00				
Contractor Projection:	16389	2644	6750	25783
Contractor Archive:	0	0	0	0
Government Projection:	37470		600	38070
Government Archive:				0
Task: Mobilization/Demob (09) 01/01/00 - 03/01/00				
Contractor Projection:	3275	454	633	4362
Contractor Archive:				0
Task: Operations (13) 01/01/00 - 03/01/00				
Contractor Projection:	29069	23124	196860	249053
Contractor Archive:	0	0	0	0

Cost Summary by Task Code

Page: 2

Projection Name: Egan Marine (CERCLA)
 Projection Type: Initial

Date: 02/29/00
 Prime Contractor: EQM5

	Personnel Cost	Equipment Cost	Other Cost	Total Cost
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(Contractor Subtotals:)	48733	26222	204243	279198
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(Government Subtotals:)	37470	0	600	38070
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CONTRACTOR

=====

(Contractor Contingency:25.00%)	12183	6556	51061	69800
(Including Contractor Contingency)	60916	32778	255304	348998
(Site Contingency:25.00%)	12183	6556	51061	69800
(Including Site Contingency)	73100	39333	306365	418797

GOVERNMENT

=====

(Site Contingency:25.00%)	9368	0	150	9518
(Including Site Contingency)	46838	0	750	47588

PROJECT TOTAL

=====

	119937	39333	307115	466385
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Contractor
All Costs by Task Code

Page: 1

Projection Name: Egan Marine (CERCLA)
Task:Administrative (06) 01/01/00 - 03/01/00

Date: 02/29/00

Projection Type: Initial

PERSONNEL

CLIN	Job Description	Ctr. Code	Regular Hrs/Day	O.T. Hrs/Day	Regular Rate	O.T. Rate	No. of Qty	Days	Projection Cost	Archive Cost	Total Cost
S1-05-01	Response Manager	EQM5	8.0	2.0	35.86	47.69	1	20	7645		7645
S2-13-01	Field Cost Admin.	EQM5	8.0	2.0	24.30	32.32	1	20	5181		5181
S4-01-01	Chemist	EQM5	8.0	0.0	36.06	36.06	1	5	1442		1442
S5-20-01	T&D Coordinator	EQM5	8.0	0.0	53.03	0.00	1	5	2121		2121
(Subtotals:)									16389	0.00	16389

EQUIPMENT

CLIN	Equipment Description	Ctr. Code	Hrs/ Day	Reg Qty	Mob Days	Stby Days	Decon Days	Projection Cost	Archive Cost	Total Cost
10910	Car-Passenger HR:0.00 DR:37.68 WR:0.00 MR:0.00	BQM5	8.0	1	20	2	2	0	904	904
13610	Pickup-2 wheel drive HR:0.00 DR:45.21 WR:0.00 MR:0.00	EQM5	8.0	1	20	2	2	0	1085	1085
25520	Office-8x20 HR:0.00 DR:0.00 WR:0.00 MR:300.00	EQM5	8.0	1	20	2	2	2	300	300
72320	Computer-Portable PC HR:0.00 DR:10.25 WR:0.00 MR:0.00	EQM5	8.0	1	20	0	0	0	205	205
72340	Computer-Laser Printer HR:0.00 DR:0.00 WR:0.00 MR:50.00	EQM5	8.0	1	20	0	0	0	50	50
73110	Copier- HR:0.00 DR:0.00 WR:0.00 MR:50.00	EQM5	8.0	1	20	0	0	0	50	50
74510	Facsimile Machine- HR:0.00 DR:0.00 WR:0.00 MR:50.00	EQM5	8.0	1	20	0	0	0	50	50
(Subtotals:)								2644	0.00	2644

Contractor
All Costs by Task Code

Page: 2

Projection Name: Egan Marine (CERCLA)
Task:Administrative (06) 01/01/00 - 03/01/00

Date: 02/29/00
Projection Type: Initial

OTHER

Ctr. Vend			Billing	Unit Cost	Units	Qty	Projection Cost	Archive Cost	Total Cost
Description	Code	Cost Type							
Fuel-Gasoline	EQM5	Fuel		1.50	Gal	500.0	750		750
Lodging	EQM5	Lodging	Sub Contr	4160.00	Bulk	1.0	4160		4160
Perdiem	EQM5	Perdiem	Sub Contr	1840.00	Bulk	1.0	1840		1840
(Subtotals:)							6750	0.00	6750
(Totals for Task Code: 06)							25,783	0.00	25,783

Contractor

All Costs by Task Code

Page : 3

Projection Name: Egan Marine (CERCLA)

Date: 02/29/00

Task :Mobilization/Demob (09) 01/01/00 - 03/01/00

Projection Type: Initial

PERSONNEL

=====		Ctr.	Regular	O.T.	Regular	O.T.	No. of	Projection	Archive	Total
CLIN	Job Description	Code	Hrs/Day	Hrs/Day	Rate	Rate	Qty	Days	Cost	Cost
S1-05-01	Response Manager	EQMS	8.0	0.0	35.86	47.69	1	2	574	574
S1-10-01	Foreman	EQMS	8.0	0.0	34.29	45.61	1	2	549	549
S2-03-01	Clean-Up Technician	EQMS	8.0	0.0	22.45	29.86	2	2	718	718
S2-05-01	Equipment Operator	EQMS	8.0	0.0	32.65	43.42	2	2	1045	1045
S2-13-01	Field Cost Admin.	EQMS	8.0	0.0	24.30	32.32	1	2	389	389
-----										-----
(Subtotals:)								3275	0.00	3275

EQUIPMENT

CLIN	Equipment Description	Code	Ctr.	Hrs/	Reg	Mob	Stby	Decon	Projection	Archive	Total
			Day	Qty	Days	Days	Days	Days	Cost	Cost	Cost
10	Car-Passenger	EQM5	8.0	1	2	0	0	0	75		75
	HR:0.00 DR:37.68 WR:0.00 MR:0.00										
13610	Pickup-2 wheel drive	EQM5	8.0	1	2	0	0	0	90		90
	HR:0.00 DR:45.21 WR:0.00 MR:0.00										
13620	Pickup-4 wheel drive	EQM5	8.0	1	2	0	0	0	115		115
	HR:0.00 DR:57.41 WR:0.00 MR:0.00										
14510	Stakebed-1 ton	EQM5	8.0	1	2	0	0	0	174		174
	HR:0.00 DR:87.14 WR:0.00 MR:0.00										
(Subtotals:)									454	0.00	454

OTHER

	Ctr. Vend					Projection		Archive	Total			
Description	Code	Code	Cost	Type	Billing	Unit	Cost	Units	Qty	Cost	Cost	Cost
Fuel-Gasoline	EQM5	Fuel		Purchase		1.50	Gal	100.0		150		150
Perdiem	EQM5	Perdiem		Sub Contr		483.00	Bulk	1.0		483		483
									-----	-----	-----	-----
				(Subtotals:)					633	0.00	0.00	633
									=====	=====	=====	=====
				(Totals for Task Code: 09)					4,362	0.00	0.00	4,362

Contractor
All Costs by Task Code

Page: 4

Projection Name: Egan Marine (CERCLA)
Task:Operations (13) 01/01/00 - 03/01/00

Date: 02/29/00
Projection Type: Initial

PERSONNEL

CLIN	Job Description	Ctr. Code	Regular Hrs/Day	O.T. Hrs/Day	Regular Rate	O.T. Rate	No. of Qty	Days	Projection Cost	Archive Cost	Total Cost
S1-10-01	Foreman	EQMS	8.0	2.0	34.29	45.61	1	20	7311		7311
S2-03-01	Clean-Up Technician	EQMS	8.0	2.0	22.45	29.86	2	20	9573		9573
S2-05-01	Equipment Operator	EQMS	8.0	1.0	32.65	43.42	2	20	12185		12185
(Subtotals:)											
									29069	0.00	29069

EQUIPMENT

CLIN	Equipment Description	Ctr. Code	Hrs/ Day	Reg Qty	Mob Days	Stby Days	Decon Days	Projection Cost	Archive Cost	Total Cost
13620	Pickup-4 wheel drive HR:0.00 DR:57.41 WR:0.00 MR:0.00	EQMS	8.0	1	20	2	2	0	1378	1378
10	Stakebed-1 ton HR:0.00 DR:87.14 WR:0.00 MR:0.00	EQMS	8.0	1	20	2	2	0	2091	2091
15138	Vacuum-3800 gallons / Dump HR:0.00 DR:266.54 WR:0.00 MR:0.00	EQMS	8.0	1	5	2	2	2	2932	2932
22020	Decon-8x25 HR:0.00 DR:53.31 WR:0.00 MR:0.00	EQMS	8.0	1	20	2	2	0	1279	1279
25520	Office-8x20 HR:0.00 DR:0.00 WR:0.00 MR:200.00	EQMS	8.0	1	20	2	2	0	200	200
32710	Drum-Crusher HR:0.00 DR:84.06 WR:0.00 MR:0.00	EQMS	8.0	1	20	2	2	2	2186	2186
39510	Uni Loader-w/ bucket HR:0.00 DR:88.16 WR:0.00 MR:0.00	EQMS	8.0	1	20	2	2	2	2292	2292
39525	Uni Loader-Forks Attachment HR:0.00 DR:22.15 WR:0.00 MR:0.00	EQMS	8.0	1	20	2	2	2	576	576
39535	Uni Loader-Barrel grappeler atta HR:0.00 DR:71.76 WR:0.00 MR:0.00	EQMS	8.0	1	20	2	2	2	1866	1866
40635	Analyzer-Hazcat System HR:0.00 DR:28.70 WR:0.00 MR:0.00	EQMS	8.0	1	5	2	2	2	316	316

Contractor

All Costs by Task Code

Page: 5

Projection Name: Egan Marine (CERCLA)
 Task:Operations (13) 01/01/00 - 03/01/00

Date: 02/29/00

Projection Type: Initial

EQUIPMENT

CLIN	Equipment Description	Ctr. Code	Hrs/ Day	Reg Qty	Mob Days	Stby Days	Decon Days	Projection Cost	Archive Cost	Total Cost
44920	Fume Hood-Vented	EQM5	8.0	1	5	2	2	90		90
	HR:0.00 DR:8.20 WR:0.00 MR:0.00									
50551	PPE-Lvl B/SCBA/Low Pres	EQM5	8.0	1	5	2	2	212		212
	HR:0.00 DR:19.27 WR:0.00 MR:0.00									
51510	Radio-Handheld	EQM5	8.0	1	20	0	0	103		103
	HR:0.00 DR:5.13 WR:0.00 MR:0.00									
75105	Generator-5 KW	EQM5	8.0	1	20	2	2	586		586
	HR:0.00 DR:22.55 WR:0.00 MR:0.00									
75511	Hose-Discharge / 2"	EQM5	8.0	1	5	2	2	27		27
	HR:0.00 DR:2.46 WR:0.00 MR:0.00									
75531	Hose-Suction 2"	EQM5	8.0	1	5	2	2	27		27
	HR:0.00 DR:2.46 WR:0.00 MR:0.00									
79612	Water Laser-HI-Pressure Single	EQM5	8.0	1	20	2	2	6151		6151
	HR:0.00 DR:256.29 WR:0.00 MR:0.00									
80120	Acid-2 inches	EQM5	8.0	1	5	2	2	812		812
	HR:0.00 DR:73.81 WR:0.00 MR:0.00									

(Subtotals:)

23124

0.00

23124

OTHER

Description	Ctr. Vend				Billing	Unit Cost	Units	Qty	Projection Cost	Archive Cost	Total Cost
	Code	Code	Cost	Type							
Disposal-Acids	EQM5	Disposal			Purchase	3.00	Gal	10000.0	30000		30000
Disposal-Drums	EQM5	Disposal			Sub Contr	100.00	Each	1500.0	150000		150000
Fuel-Diesel	EQM5	Fuel				1.20	Gal	300.0	360		360
Fuel-Gasoline	EQM5	Fuel				1.50	Gal	600.0	900		900
Lodging	EQM5	Lodging			Sub Contr	10400.00	Bulk	1.0	10400		10400
Perdiem	EQM5	Perdiem			Sub Contr	4600.00	Bulk	1.0	4600		4600
Utilities-Electric	EQM5	Utilities				500.00	Bulk	1.0	500		500

Contractor
All Costs by Task Code

Page: 6

Projection Name: Egan Marine (CERCLA)
Task:Operations (13) 01/01/00 - 03/01/00

Date: 02/29/00

Projection Type: Initial

OTHER						Projection		Archive		Total		
=====		Ctr. Vend										
Description	Code	Code	Cost	Type	Billing	Unit	Cost	Units	Qty	Cost	Cost	Cost
Utilities-Water	EQM5	Utilities			100.00	Bulk			1.0	100		100
										-----	-----	-----
					(Subtotals:)					196860	0.00	196860
										=====	=====	=====
					(Totals for Task Code: 13)					249,053	0.00	249,053
										=====	=====	=====
					(Projection Totals:)					279,198	0.00	279,198
										=====	=====	=====
					(Contractor Contingency:25.00%)					348,998		348,998
										=====	=====	=====
					(Site Contingency:25.00%)					418,797		418,797

Government

All Costs by Task Code

Page: 1

Projection Name: Egan Marine (CERCLA)

Date: 02/29/00

Task:Administrative (06) 01/01/00 - 03/01/00

Projection Type: Initial

PERSONNEL

		Ctr.	Regular	O.T.	Regular	O.T.	No. of	Projection	Archive	Total
CLIN	Job Description	Code	Hrs/Day	Hrs/Day	Rate	Rate	Qty	Days	Cost	Cost
S1-05-01	On Scene Coordinator	EPA	8.0	2.0	35.00	35.00	1	20	19390	19390
S4-17-01	Engineer/Environment	TAT	8.0	2.0	40.00	40.00	1	20	18080	18080
(Subtotals:)								37470	0.00	37470

EQUIPMENT

CLIN	Equipment Description	Ctr.	Hrs/ Code	Reg Day	Mob Qty	Stby Days	Decon Days	Projection Cost	Archive Cost	Total Cost		
										0		
(Subtotals:)										0	0.00	0

OTHER

(Projection Totals:)

38,070

0.00

38,070

(Site Contingency: 35.00%)

47 588

47-588

OPA Costs

=====
Cost Summary

Page: 1

Projection Name: Egan Marine (OPA)
Projection Type: Initial

Date: 02/29/00
Prime Contractor: EQMS

CONTRACTOR

Personnel Cost	103932
Equipment Cost	85266
Other Direct Cost	525320
Total for Contractor	714518
Contractor Contingency: 25%	178630
Including Contractor Contingency:	893148
Site Contingency: 25%	178630
Including Site Contingency:	1071777

GOVERNMENT

Personnel Cost	
EPA	43628
TAT	18000
	61628
Equipment Cost	
	0
Other Direct Cost	
EPA	300
TAT	300
	600
Total for Government	62228
Site Contingency: 25%	15557
Including Site Contingency:	77785
PROJECT TOTAL	1149562

Cost Summary by Task Code

Page: 1

Projection Name: Egan Marine (OPA)
Projection Type: Initial

Date: 02/29/00
Prime Contractor: EQMS

	Personnel Cost	Equipment Cost	Other Cost	Total Cost
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Task: Administrative (06) 01/01/00 - 03/01/00

Contractor Projection:	32422	5422	14250	52094
Contractor Archive:	0	0	0	0
Government Projection:	61628		600	62228
Government Archive:				0

Task: Mobilization/Demob (09) 01/01/00 - 03/01/00

Contractor Projection:	2198	2628	460	5286
Contractor Archive:				0

Task: Operations (13) 01/01/00 - 03/01/00

Contractor Projection:	69312	77216	510610	657138
Contractor Archive:	0	0	0	0

Cost Summary by Task Code

Page: 2

Projection Name: Egan Marine (OPA)
 Projection Type: Initial

Date: 02/29/00
 Prime Contractor: EQMS

	Personnel Cost	Equipment Cost	Other Cost	Total Cost
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(Contractor Subtotals:)	103932	85266	625320	714518
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(Government Subtotals:)	61628	0	600	62228
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CONTRACTOR

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(Contractor Contingency:25.00%)	25983	21317	131330	178630
(Including Contractor Contingency)	129915	106583	656650	893148
(Site Contingency:25.00%)	25983	21317	131330	178630
(Including Site Contingency)	155898	127899	787980	1071777

GOVERNMENT

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(Site Contingency:25.00%)	15407	0	150	15557
(Including Site Contingency)	77035	0	750	77785

PROJECT TOTAL

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	232933	127899	788730	1149562
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Contractor
All Costs by Task Code

Page: 1

Projection Name: Egan Marine (OPA)
Task:Administrative (06) 01/01/00 - 03/01/00

Date: 02/29/00

Projection Type: Initial

PERSONNEL

CLIN	Job Description	Ctr. Code	Regular	O.T.	Regular	O.T.	No. of		Projection	Archive	Total
			Hrs/Day	Hrs/Day	Rate	Rate	Qty	Days	Cost	Cost	Cost
S1-05-01	Response Manager	EQM5	8.0	2.0	35.86	47.69	1	45	17202		17202
S2-13-01	Field Cost Admin.	EQM5	8.0	2.0	24.30	32.32	1	45	11657		11657
S4-01-01	Chemist	EQM5	8.0	0.0	36.06	36.06	1	5	1442		1442
S5-20-01	T&D Coordinator	EQM5	8.0	0.0	53.03	0.00	1	5	2121		2121
(Subtotals:)								32422	0.00	32422	

EQUIPMENT

CLIN	Equipment Description	Ctr. Code	Reg	Mob	Stby	Decon	Projection	Archive	Total		
			Hrs/ Day	Qty	Days	Days	Cost	Cost	Cost		
10910	Car-Passenger	BQM5	8.0	1	45	2	2	0	1846		
	HR:0.00 DR:37.68 WR:0.00 MR:0.00								1846		
13610	Pickup-2 wheel drive	BQM5	8.0	1	45	2	2	0	2215		
	HR:0.00 DR:45.21 WR:0.00 MR:0.00								2215		
25520	Office-8x20	BQM5	8.0	1	45	2	2	2	600		
	HR:0.00 DR:0.00 WR:0.00 MR:300.00								600		
72320	Computer-Portable PC	BQM5	8.0	1	45	0	0	0	461		
	HR:0.00 DR:10.25 WR:0.00 MR:0.00								461		
72340	Computer-Laser Printer	BQM5	8.0	1	45	0	0	0	100		
	HR:0.00 DR:0.00 WR:0.00 MR:50.00								100		
73110	Copier-	BQM5	8.0	1	45	0	0	0	100		
	HR:0.00 DR:0.00 WR:0.00 MR:50.00								100		
74510	Facsimile Machine-	BQM5	8.0	1	45	0	0	0	100		
	HR:0.00 DR:0.00 WR:0.00 MR:50.00								100		
(Subtotals:)								5422	0.00	5422	

Contractor
All Costs by Task Code

Page: 2

Projection Name: Egan Marine (OPA)
Task:Administrative (06) 01/01/00 - 03/01/00

Date: 02/29/00

Projection Type: Initial

OTHER

Ctr. Vend				Billing	Unit Cost	Units	Qty	Projection Cost	Archive Cost	Total Cost
Description	Code	Code	Cost Type							
Gasoline	EQMS	Fuel			1.50	Gal	500.0	750		750
Lodging	EQMS	Lodging		Sub Contr	9360.00	Bulk	1.0	9360		9360
Perdiem	EQMS	Perdiem		Sub Contr	4140.00	Bulk	1.0	4140		4140
								-----	-----	-----
				(Subtotals:)				14250	0.00	14250
								=====	=====	=====
(Totals for Task Code: 06)								52,094	0.00	52,094

Contractor
All Costs by Task Code

Page: 3

Projection Name: Egan Marine (OPA)

Date: 02/29/00

Task: Mobilization/Demob (09) 01/01/00 - 03/01/00

Projection Type: Initial

PERSONNEL

CLIN	Job Description	Ctr. Code	Regular Hrs/Day	O.T. Hrs/Day	Regular Rate	O.T. Rate	No. of Qty	Days	Projection Cost	Archive Cost	Total Cost
S1-05-01	Response Manager	EQM5	8.0	0.0	35.86	47.69	1	2	574		574
S1-10-01	Foreman	EQM5	8.0	0.0	34.29	45.61	1	2	549		549
S2-03-01	Clean-Up Technician	EQM5	8.0	0.0	22.45	29.86	1	2	359		359
S2-05-01	Equipment Operator	EQM5	8.0	0.0	32.65	43.42	1	2	522		522
S2-13-01	Field Cost Admin.	EQM5	8.0	0.0	24.30	32.32	1	1	194		194
(Subtotals:)									2198	0.00	2198

EQUIPMENT

CLIN	Equipment Description	Ctr. Code	Hrs/ Day	Reg Qty	Mob Days	Stby Days	Decon Days	Projection Cost	Archive Cost	Total Cost	
10	Car-Passenger	EQM5	8.0	1	2	0	0	0	75	75	
	HR:0.00 DR:37.68 WR:0.00 MR:0.00										
13610	Pickup-2 wheel drive	EQM5	8.0	1	2	0	0	0	90	90	
	HR:0.00 DR:45.21 WR:0.00 MR:0.00										
13620	Pickup-4 wheel drive	EQM5	8.0	1	2	0	0	0	115	115	
	HR:0.00 DR:57.41 WR:0.00 MR:0.00										
14510	Stakebed-1 ton	EQM5	8.0	1	2	0	0	0	174	174	
	HR:0.00 DR:87.14 WR:0.00 MR:0.00										
24530	Lowboy-30 ton	EQM5	8.0	2	2	0	0	0	390	390	
	HR:0.00 DR:97.39 WR:0.00 MR:0.00										
33055	Excavator-CAT 215C	EQM5	8.0	1	2	0	0	0	697	697	
	HR:0.00 DR:348.55 WR:0.00 MR:0.00										
36050	Loader/Wheel-CAT 950E	EQM5	8.0	1	2	0	0	0	677	677	
	HR:0.00 DR:338.30 WR:0.00 MR:0.00										
37010	Shears-Boom attachment/small	EQM5	8.0	1	2	0	0	0	410	410	
	HR:0.00 DR:205.03 WR:0.00 MR:0.00										
(Subtotals:)									2628	0.00	2628

Contractor

All Costs by Task Code

Page: 4

Projection Name: Egan Marine (OPA)

Date: 02/29/00

Task: Mobilization/Demob (09) 01/01/00 - 03/01/00

Projection Type: Initial

OTHER

	Ctr. Vend					Projection	Archive	Total			
Description	Code	Code	Cost	Type	Billing	Unit Cost	Units	Qty	Cost	Cost	Cost
Fuel-Diesel/Gasoline	EQM5		Fuel			1.50	Gal	100.0	150		150
Perdiem	EQM5		Perdiem		Sub Contr	310.00	Bulk	1.0	310		310
									-----	-----	-----
					(Subtotals:)				460	0.00	460
									=====	=====	=====
					(Totals for Task Code: 09)				5,286	0.00	5,286

Contractor

All Costs by Task Code

Page: 5

Projection Name: Egan Marine (OPA)
 Task:Operations (13) 01/01/00 - 03/01/00

Date: 02/29/00

Projection Type: Initial

PERSONNEL

CLIN	Job Description	Ctr. Code	Regular Hrs/Day	O.T. Hrs/Day	Regular Rate	O.T. Rate	No. of Qty	Days	Projection Cost	Archive Cost	Total Cost
S1-10-01	Foreman	EQMS	8.0	2.0	34.29	45.61	1	45	16449		16449
S2-03-01	Clean-Up Technician	EQMS	8.0	2.0	22.45	29.86	2	45	21539		21539
S2-05-01	Equipment Operator	EQMS	8.0	2.0	32.65	43.42	2	45	31324		31324
(Subtotals:)											
									69312	0.00	69312

EQUIPMENT

CLIN	Equipment Description	Ctr. Code	Hrs/ Day	Reg Qty	Mob Days	Stby Days	Decon Days	Projection Cost	Archive Cost	Total Cost
13620	Pickup-4 wheel drive HR:0.00 DR:57.41 WR:0.00 MR:0.00	EQMS	8.0	1	45	2	2	0	2813	2813
10	Stakebed-1 ton HR:0.00 DR:87.14 WR:0.00 MR:0.00	EQMS	8.0	1	45	2	2	0	4270	4270
22020	Decon-8x25 HR:0.00 DR:53.31 WR:0.00 MR:0.00	EQMS	8.0	1	45	2	2	0	2612	2612
24530	Lowboy-30 ton HR:0.00 DR:97.39 WR:0.00 MR:0.00	EQMS	8.0	2	2	2	0	0	779	779
25520	Office-8x20 HR:0.00 DR:0.00 WR:0.00 MR:200.00	EQMS	8.0	1	45	2	2	0	400	400
33055	Excavator-CAT 215C HR:0.00 DR:348.55 WR:0.00 MR:0.00	EQMS	8.0	1	45	2	2	2	17776	17776
36050	Loader/Wheel-CAT 950E 3.5 cyd HR:0.00 DR:338.30 WR:0.00 MR:0.00	EQMS	8.0	1	45	2	2	2	17253	17253
37010	Shears-Boom attachmnt/small HR:0.00 DR:205.03 WR:0.00 MR:0.00	EQMS	8.0	1	10	2	2	2	3280	3280
51510	Radio-Handheld HR:0.00 DR:5.13 WR:0.00 MR:0.00	EQMS	8.0	1	45	0	0	0	231	231
73310	Cutting Torch- HR:0.00 DR:8.20 WR:0.00 MR:0.00	EQMS	8.0	1	45	2	2	2	418	418

Contractor
All Costs by Task Code

Page: 6

Projection Name: Egan Marine (OPA)
Task: Operations (13) 01/01/00 - 03/01/00

Date: 02/29/00
Projection Type: Initial

EQUIPMENT

CLIN	Equipment Description	Ctr.	Hrs/ Code	Reg Day	Mob Qty	Stby Days	Decon Days	Projection Cost	Archive Cost	Total Cost
75105	Generator-5 KW HR:0.00 DR:22.55 WR:0.00 MR:0.00	EQM5	8.0	1	45	2	2	1150		1150
75513	Hose-Discharge / 4" HR:0.00 DR:3.38 WR:0.00 MR:0.00	EQM5	8.0	1	45	2	2	172		172
75533	Hose-Suction 4" HR:0.00 DR:3.38 WR:0.00 MR:0.00	EQM5	8.0	1	45	2	2	172		172
77332	Oil-Skimmer w/o Power HR:0.00 DR:20.50 WR:0.00 MR:0.00	EQM5	8.0	1	45	2	2	1046		1046
77340	Oil-Skimmer Heads HR:0.00 DR:32.80 WR:0.00 MR:0.00	EQM5	8.0	1	45	2	2	1673		1673
79612	Water Laser-HI-Pressure Single HR:0.00 DR:256.29 WR:0.00 MR:0.00	EQM5	8.0	1	45	2	2	12558		12558
85420	Trash-4 inch HR:0.00 DR:90.21 WR:0.00 MR:0.00	EQM5	8.0	1	45	2	2	4601		4601
90505	Boom-Harbor 6"-12" Skirt HR:0.00 DR:117.89 WR:0.00 MR:0.00	EQM5	8.0	1	45	2	2	6012		6012
(Subtotals:)								77216	0.00	77216

OTHER

Description	Ctr.	Vend	Billing	Unit	Cost	Units	Qty	Projection Cost	Archive Cost	Total Cost
	Code	Code	Cost	Type						
Diesel	EQM5	Fuel			1.20	Gal	300.0	360		360
Disposal-Waste oil	EQM5	Disposal			3.00	Gal	50000.0	150000		150000
Disposal-Waste Soil	EQM5	Disposal			65.00	Tons	5000.0	325000		325000
Electric	EQM5	Utilities			500.00	Bulk	1.0	500		500
Gasoline	EQM5	Fuel			1.50	Gal	600.0	900		900
Lodging	EQM5	Lodging	Sub Contr		23400.00	Bulk	1.0	23400		23400
Perdiem	EQM5	Perdiem	Sub Contr		10350.00	Bulk	1.0	10350		10350

Contractor

All Costs by Task Code

Page : 7

Projection Name: Egan Marine (OPA)
Task:Operations (13) 01/01/00 - 03/01/00

Date: 02/29/00

Projection Type: Initial

OTHER						Projection	Archive	Total			
=====		Ctr. Vend									
Description	Code	Code	Cost	Type	Billing	Unit Cost	Units	Qty	Cost	Cost	Cost
Water	EQM5	Utilities			100.00	Bulk		1.0	100		100
									-----	-----	-----
					(Subtotals:)				510610	0.00	510610
									=====	=====	=====
					(Totals for Task Code: 13)				657,138	0.00	657,138
									=====	=====	=====
					(Projection Totals:)				714,518	0.00	714,518
									=====	=====	=====
					(Contractor Contingency:25.00%)				893,148		893,148
									=====	=====	=====
					(Site Contingency:25.00%)				1,071,777		1,071,777

Government
All Costs by Task Code

Page: 1

Projection Name: Egan Marine (OPA)
Task:Administrative (06) 01/01/00 - 03/01/00

Date: 02/29/00
Projection Type: Initial

PERSONNEL

CLIN	Job Description	Ctr. Code	Regular Hrs/Day	O.T. Hrs/Day	Regular Rate	O.T. Rate	Qty	No. of Days	Projection Cost	Archive Cost	Total Cost
S1-05-01	On Scene Coordinator	EPA	8.0	2.0	35.00	35.00	1	45	43628		43628
S4-17-01	Engineer/Environment	TAT	8.0	2.0	40.00	40.00	1	45	18000		18000
(Subtotals:)									61628	0.00	61628

EQUIPMENT

CLIN	Equipment Description	Ctr. Code	Hrs/ Day	Reg Qty	Mob Days	Stby Days	Decon Days	Projection Cost	Archive Cost	Total Cost	
(Subtotals:)									0	0.00	0

OTHER

Description	Ctr. Code	Vend Code	Cost	Type	Billing	Unit	Cost	Units	Qty	Projection Cost	Archive Cost	Total Cost
Fuel-Gasoline	EPA	AVIS	Fuel		Purchase	1.50	Gal	200.0	300			300
Fuel-Gasoline	TAT		Fuel			1.50	Gal	200.0	300			300
(Subtotals:)									600	0.00	600	
(Totals for Task Code: 06)									62,228	0.00	62,228	
(Projection Totals:)									62,228	0.00	62,228	
(Site Contingency:25.00%)									77,785		77,785	